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CONTENTS.

Agricultural.—Current Agricultural Fallacies—The Buckeye Cultivator—Sheep Breeders and Wool Growers of Northern Ohio—Pencil Sketches by the Way—Wool Notes—Horse Matters—Draft and Business Horses—Take Care of the Coll's Feet—The Farm—Our French Letter—Diseases of Sheep—The Fertilizer Problem—Bean Culture—Parasites for Cows—Agricultural Items—Horticultural.—Five Best Varieties of Market Apples for East Michigan—Composition of a Good Grape Soil—The Orchard Damage—Late Cabbage—To Raise Squashes—Profitable Strawberry Culture—Horticultural Notes—Agriculture.—Bee Notes—Feeding Bees—Editorial.—Wheat—Corn and Oats—Hops and Barley—Dairy Products—Wool—Some Pertinent Questions—The Free Trade Convention—Next Summary—Michigan—General—Foreign—Poetry.—The Traveler at Sunset—A Little Sufficeit—Macleanism.—A Mining Story—An Old Woman's Story—The Rebel Ram Manassas—Animal Intelligence—Beating the Customs—The Bermuda Islands—The Under Dog in the Fight—Edwin and Angelina, Their Cow—The Bad Boy Goes Out Riding—Crawling Leaves—Varieties—Chaff—Household.—The Essentials of Good Butter—Old Times—Old Stoves—Useful Recipes—Veterinary.—Anthrax Fever—Chronic Diseases of Urinary Organs—Unexpected Dissolution of a Cow—Bruised Knee in Filly, and Induration swelling in Colt—Diarrhea or Scours in Calves—Call for a State Convention—A Food Preservative—Who is J. Schoenhof?—Stock Notes—The British Grain Trade—Commercial.

Agricultural.

CURRENT AGRICULTURAL FALLACIES.

There are so many more things we do not know than there are that we have accurate knowledge of, that we are often tempted to guess at the unknown, or be led into making blunders by a plausible theory. These fallacies appear in print from a source the editor deems a reliable one, and the error passes into a common belief through the dignity of a printed column. People get into the habit of believing what their paper states as true; it saves the trouble of thinking for one's self, and this is what many people pay their money for. They take their opinions on all intricate questions second hand and peddle them out for truth, so bad practices are continued through a bigoted belief.

Sometimes a person who never has been famous for his research into hidden things, becomes impressed with some ideal theory, and delivers it to run loose in the agricultural pasture, where it becomes a free lobby for all to ride. An indolent man was once driven from his bed by an emergency at four o'clock on a June morning, when on discovering the brilliant light of the on-coming day, he rushed to his neighbors to proclaim the advent of a phenomenon. There are a lot of farmers and writers on farm topics who don't get up early enough in agricultural matters to see the light.

As an evidence that great minds run in the same channel (and by the same rule small ones) we periodically see some old exploded bubble blown up by a new prophet; and set dangling in the agricultural papers. The influence of the stock upon the scion and thence to the fruit has been a fertile source of effusive knowledge. The tantalizing fact that the fruit is not changed despite so many plausible reasons why it should be, sets some callow philosopher at work trying to prove that it does. He sets down some appearance or spot as proof of the transmission of qualities from the adopted stem. A Massachusetts horticulturist writing to the *Germanian Telegraph*, a paper, by the way, that has the reputation of knowing something of horticultural matters, says: "I can show specimens of different kinds become very near in kind to the last stock grafted on," now note his fallacy, "and why should they not, grafted in the haphazard way it is done." He continues: "For instance, take two small scions of a delicate sweet variety and graft them into a nearly sour stock and you might as well expect to take perfect stock bred from scrags and thoroughbreds." This latter lucid illustration is put in for proof, I suppose in the way of analogy. To follow it up we must suppose that those "scrags and thoroughbreds" must all be changed in color now since being turned to grass, and green-colored stock must be universal, which will change to brown in the fall and yellow when fed on meal. We can change mutton into beef by turning the sheep into the cow pasture, and perhaps chickens can be changed into golden pippins by roosting in the apple trees.

His theory of improvement is equally new and novel. He says "the only true way I can see for improvement is to get trees if possible grown on soil like that on which they are to stand and grow them thick enough so that when they get sufficient growth to commence bearing you can select out the different kinds, and graft the sweet into stock of the same kind, and sour into sour, keeping in view size, quality, etc. Graft the late or keeping qualities on the same kind, and early on early. In this way the stock can be improved."

How this Solon and Darwinian thinker has been kept in seclusion so long is a mystery. It is explained only by the fact that he lives in Massachusetts and is overshadowed by greater minds and must

send his philosophical studies out into the region of Philadelphia to have them aired. In spite of all these savants who would teach nature how to manage, a Baldwin will still be red and moderately sour—will bear heavily in the bearing year and no other, notwithstanding it has passed through more varieties of stocks on which to grow than any other known apple, perhaps. Within the bud is enfolded the law which governs the fruit, the change occurs through the seed, and not through the sap. The opening leaf of the new scion is set free by the same upflow of sap which clothes the parent stem with foliage, but this sap does not become fruit until exposed to the alchemy of the leaves, and is returned commissioned by them to grow into sweet and sour, red and green, large and small.

"How should the poppy steal sleep from the very source, That grants to the grapevine juice that can madden or cheer. How does the weed find food for its fabric coarser, Where the lilies proud their blossoms pure away."

Yet lilies, and weeds, and grapes, and poppies are still the same, though nourished by the same "handful of earth" and the same upflow of sap from it. The folly of the sappy philosophers is that they only learn half the lesson and then guess at the answer. The Massachusetts Ploughman gives currency to another fallacy when it advises its readers "to try to catch the moth as they ascend the trees to lay eggs for a second crop of worms. To catch the moths a band of cotton around the trunk of the tree near the branches will do good, if frequent examinations are made and the moth killed." Now moths may climb the trunks of the apple trees in Massachusetts, but they are not in Michigan; here they fly, and then only in the night time, and they are not foolish enough to crawl under a band of cotton either, although some of the worms will.

This fallacy formulator farther recommends as "the most effectual way to get rid of the codling moth to turn piggies enough into the orchard to eat the apples as fast as they drop."

This is not "effectual" in Michigan nor in Massachusetts either. Although some worms may be destroyed in that way, it is accidental as far as the worms are concerned. The second crop of worms, like the second crop of potato bugs, come to stay over, and they don't calculate to be thus ingloriously eaten up. When an apple is so far gone as to fall from the stem, it has become distasteful to the worm and he has left for fresh pastures, he has tunneled out a new home in a sound apple and patiently waits his turn for hibernation. You cannot catch the moths. You cannot "get rid" of the pest by turning hogs in the orchard, as those who follow their advice will learn. The only "effectual" way is to kill the eggs after they are laid, or the worms before they become moths. A sprinkling of paris green in water applied to the tree soon after the blossoms fall has proved very effectual in Michigan, and will probably prove equally effective in Massachusetts.

Fallacies are sometimes widely expressed in the form of opinions. This correspondence for May 15th, was last week assailed for expressing the following: "Those who claim that corn should be cultivated shallower as it gets larger, are wiser than their neighbors who practice the opposite way, especially if the season be a dry one." A very eminent agriculturalist replies that in his opinion "No greater error could be committed," and farther along he says, "The after cultivation should not be so close to the hills as at first, but should go deeper and deeper." Each of these articles gives reasons, modified by character of soil and conditions, which are respectfully submitted to the arbitrament of Michigan farmers, assuring them that Mr. Gard does not often indulge in fallacies. A. C. G.

LAST Saturday at the Central Yards, Mr. J. Conley of Marshall had in a small bunch of steers that for style and quality have never been excelled in our market. Seven of them were two-year-olds and were fed by Mr. W. S. Harris of Eckford, Calhoun County, and one a three year old fed by Mr. Vandenberg of Litchfield, Hillsdale County. The first seven averaged 1,400 pounds each, while the three year old tipped the scale at 2,000 pounds. They were high grade Shorthorns, very fine boned, with broad backs, and just such animals as please a butcher's eye, giving a large percentage of fine cuts in proportion to the coarse meats. These cattle should have been marketed about one month ago, when they would have returned a much larger profit.

THE Chicago Tribune says that from 194 quarts of the milk of his 10-year-old Jersey cow Glenoe Belle, 6563, M. G. Clarke, Geneva, Ill., last week made 44 pounds of butter. This the first test of her butter producing capacity in several years, and it shows that about 25 per cent of her milk is butter, may be considered anything but discreditable. In former tests her milk made two pounds from eight quarts, and four pounds from 164 quarts. Her last calf came in January last, and during the test last made her food consisted of ordinary pasture only. Those Illinois pastures must be terribly greasy to enable a cow to do this.



THE BUCKEYE SPRING-TOOTH CULTIVATOR.

THE BUCKEYE CULTIVATOR.

Above we present a cut of the new Buckeye Spring Tooth Cultivator, manufactured by P. P. Mast & Co., Springfield, Ohio. This house justly merits the reputation of being the most enterprising manufacturers in their line in America, and when the spring tooth system of cultivation became a success, they at once got out their excellent solid frame Spring Tooth Harrow which is well known to most of our readers, and as a solid frame harrow it has no equal in the market; but most farmers want a tool for corn as well as summer fallow, and these rigid frames do not "fill the bill," for without a flexible beam that can be moved sideways, to dodge hills off the mark, it is impossible to get close to the row without tearing up corn. One or two manufacturers saw this, and built a flexible harrow, and their large sales on the crude machines they had built showed conclusively that they had the right idea, but they were so poorly built, and so full of imperfections that they came far from giving satisfaction. P. P. Mast & Co. however already had the foundation for a successful machine in their well known Buckeye Cultivator, and had only to attach the spring teeth to make the finest spring tooth cultivator in the world. They did not need to experiment and change, as will these other manufacturers, for the Buckeye Cultivator long since passed the experimental stage, and has for years been recognized as one of the leading cultivators in the field. By means of the ball in front the beams can be moved out to give room for the fallow attachment, so that the draft is perfectly square, while other machines spread out the back end to put in their attachment without moving it in front, thus bringing the teeth on a twist; or slide the axle together, which should never be disturbed, as it is the foundation of the machine, and the joint is sure to be a source of weakness; the beams are long, giving a steady motion, while in short frame machines they go hop, skip and jump over the ground where it is hard, leaving uncultivated spots over the field. The teeth are adjustable and can be set forward so as to go into the hardest clay ground, where any wheel cultivator will work, or can be set back so as to make a perfect floating harrow, and run it with the chains perfectly loose on fresh plowed land, crossing the furrows without tearing up the sod. This is a thing never before accomplished in any wheel harrow or cultivator; hitherto the depth has been regulated by the wheel, and every farmer knows how impossible it is to use a cultivator on fresh plowed land before it is leveled down without tearing up sods. But with this machine the whole work can be accomplished, using it first as a leveling harrow, and working ground for spring crops; or the first time over the summer fallow; then by turning the teeth forward the hardest summer fallow can be worked; as a corn cultivator there is nothing like it; the little spring teeth can run close to the hill without covering up the corn, tearing out the weeds that other cultivators leave and which do the most injury to corn. The teeth being in a row, they "hug" the hill all the time, so the operator only has to push out to dodge the hills off the mark, and the moment he lets up the teeth are right back to their place close to the hill; with the two levers within easy reach of the operator, the depth can instantly be governed and raised if the wheel is in the furrow, or lowered if on a ridge, and the whole machine handled without letting go of the lines, or taking the eye off the row or line; it is simply perfect, as every one says who looks at it, and we do not wonder their agents are enthusiastic talkers, for it is certainly years ahead of anything of the kind in the market; a seeder can be attached if desired, using the well known Buckeye feed. There is certainly nothing that so completely meets the want at so small a cost. To the small farmer it is a

ing harrow, corn cultivator, fallow cultivator and seeder in one machine, saving the expense of so many tools, and the trouble of storing them, besides doing the work so much better, easier and faster than his other hand tools. Improved machinery has become an absolute necessity, and farmers can no more afford to do their work without it than the country can get along without railroads, and when a first class tool is found that can be put to such a variety of uses, it is a very valuable invention, and materially lightens the expense of stocking a farm with improved machinery.

SHEEP BREEDERS AND WOOL GROWERS OF NORTHERN OHIO.

LE Roy, O., May 10, '83. The sheep breeders and wool growers of northern Ohio held their annual public shearing April 27, on the farm of Mr. Samuel Owen, near Seville, O. An election was held to select officers for the coming year, and resulted as follows: President, James Palmer; Vice President, L. B. Alexander; Secretary, Wm. Hulbert; Treasurer, S. Owen.

A large number of people were in attendance, and much interest manifested. It was proposed by Secretary Hulbert that the next shearing be held on some fair ground, so the people could be better accommodated.

Sheep were shorn that had been bred in Vermont, New York, Ohio and Wisconsin. It was decided that all things considered—weight of fleece, length of staple and weight of carcass, the New York sheep were superior to the others shown.

The following is the weight of some of the fleeces:

RAMS.			
Name of owner.	Name of sheep.	Age.	Weight of fleece.
Owen & Frazer, Hibbard.	5-33 05 1/2	Humbert, Wis.	
J. Freeman.	23 02 1/2	J. Pierce, N. Y.	
E. Brainerd.	22 10 1/2	Brainerd, Ohio.	
R. S. John Jim	20 14 1/2	J. Pierce, N. Y.	
Alexander & Co., No. 18	21 14 1/2	Alexander, O.	
W. Chambers, No. 1	19 13 1/2	Chambers, Vt.	

EWES.			
Name of owner.	Name of sheep.	Age.	Weight of fleece.
Owen & Frazer, No. 1751	113 14	Owen & Frazer, O.	
Alexander & Co., No. 34	113 14 1/2	Alexander Bros, N. Y.	
Wm. Kennedy, No. 1	8 15 1/2	Kennedy, Ohio.	
L. W. Strong, No. 46	114 02 1/2	Owen & Frazer	
J. Palmer, No. 1	20 00	Owen & Frazer	

Many others were shorn, and made a good average. Mr. Kennedy exhibited Little Tom, a Vermont ram, but reserved him for a private shearing. Among other attractions was the Alexander Bros' ram Long Wool, that sheared 20 1/2 lbs of wool, with a staple 3 1/2 inches in length. This ram was out of E. Town send's ewe 165 and by Townsend's General at 280. This ram ought to make his mark as a stock ram. The flock of Alexander Bros. was much admired for their nice style of fleece and uniformity of appearance. They are of Atwood blood, and from the flock of E. Townsend, of Pavilion Center, N. Y. The day was greatly enjoyed by all present, and the interest was kept up till the close. The association then adjourned to meet in January next. OBSERVER.

In our last issue we gave a short extract from the U. S. *Economist* advising farmers to cross their Merinos with the English mutton breeds, and contended it would result in serious loss to follow such advice. This week the *Economist* unwittingly proves that its advice was unwise. Commenting on the London wool sales it says:

"From London we learn that clothing is firm. Carpet and English combing dull. Some kinds of English wool are now lower than for seventy years. Think of that. Going away back to the Napoleonic wars to get the same level."

Think of that, indeed. Advising our farmers to grow wool that is now so low that we have to go back seventy years to find a level! And at the same time, the telegrams in the *Economist* announce that Australian fine wools are selling up to March prices, with "bidding spirited and prices firm."

PENCIL SKETCHES BY THE WAY.

The Farmer's Representative Indulges in Philosophical Musings, Induced by Bad Weather and too Much Leisure—Something About the Country he is Traveling Over.

What next? This is one of the great puzzles of human life which equally puzzles the brain of the statesman and the noodle of the cobbler. The heir of half a million is vexed with it, and it trembles on the lips of him who has eaten his last crust. The successful man avoids asking it. The beaten fears to answer it. It is signified by the earliest glimmer of speculation in the eye of infancy, and is the last expressive query ere the light of life goes out. Happy is the writer of this as he daily finds his answer in the law of benignant necessity as he solves that other question of Who next? Thrice happy is he in daily solving who next will subscribe for the FARMER.

The land in the township of Berlin, St. Clair County, is very level, with some portions of it low and swampy. It looks new as compared with some other towns close by. It never has been considered much of a wheat town but the fact of its being so level, we think, be conducive to a good crop of that cereal this year, as it is looking particularly well.

Here we called upon but very few of the farmers, but we have a pleasing recollection of looking over the farm of D. D. Kimball and also his fine flock of sheep, which though not registered, will not compare unfavorably with any in the State. He has been a sheep fancier for the last 20 years, gives them good care and attention and has made, or rather bred, for some points that will pay many breeders to more closely look after. He pointed out to us 26 ewes that are strong, vigorous and good shearers, and are from the registered buck All Right. He has bred from Taylor and also Thompson stock. He sold a buck last fall which sheared last season 24 1/2 lbs., with no tags. His average clip last year was 10 lbs. 14 oz. His buildings are cosy, his farm well tilled, and all the surroundings neat and tidy. He owns 100 acres of what we call a rich soil. Thanks for his hospitality, and the time he so kindly spent with us as we interviewed other parties.

A Coddington had no fancy stock to show us, but we did see a fine farm of 80 acres, with neat and handsome house and good barns.

Almont is one of the prettiest villages in the State, has a population of about 1,200, is well built, has an air of prosperity, and well it may; for it is surrounded by as fine a farming country, as there is in Michigan. There are four churches, one of them having cost about \$20,000. The streets are broad, and off from the main avenue well shaded, and there are many really fine private residences. We were more than delighted as we looked all through from cellar to garret the elegant house of Mr. Harvey Goodrich, and also to meet with his amiable wife and daughter, whose hospitality we found to be boundless. Of course we interviewed the foundry of Currier Brothers, the only manufacturing establishment in the village. Mr. Henry Currier showed us a large line of their specialties, all of which have a fine reputation among farmers. As business men they stand high, make good implements, no promises but what they keep, and as a natural sequence have built up a good trade. They also sell many implements of other manufacturers.

The township of the same name as the village was settled principally by the Scotch, which perhaps accounts for the thorough system of farming which prevails and for the interest taken in the raising of fine blooded stock. In all our travels we have never seen a whole township which pleases us so well, and Mr. O. F. Sanborn and W. E. Meyers very cheerfully introduced us to many of the farmers, and materially aided us in our work. We shall soon write up the whole town, but at present space is

too limited. We will only add that we had a pleasant hour at the home of George Braidwood, the owner of the Percheron horse Almont. To the merits and value of this horse as stock getter we cannot add one word, only simply as a type of this race he is hard to beat. We saw here on this farm some colts of his get that are very fine both for size, shape and action. While here Mr. Henry McCafferty of Bruce, drove into the yard with his Percheron mare, purchased in Ohio some time ago, and a four weeks old colt by her side sired by Almont. He is a beauty, and can not but grow into a valuable bit of horse flesh.

James Grey trotted out for our inspection his young Robin Hood stallion. He is seven years old, stands 15 hands two inches high, weighs 1300 lbs., is a dark dapple grey, and is one of the most gamey horses we saw. He has fine movement, and is greatly admired. George Townsend also showed us his Percheron Gonderre; and by the way, we saw in the pasture at John Kelly's a two-year-old colt from this horse that weighs a trifle over 1,300 lbs., which shows what this horse's stock is.

Dryden village, in same named township, is six miles west of Almont. Here we are taken in hand by J. W. Cole, who, although out of health, cheerfully spent a day with us driving around. He owns a fine farm of 250 acres with all the *ed-ceders* pertaining to a first-class farm. He showed us some fine stock, and from his front porch as handsome a landscape as ever gladdened the eye. The land is rolling, the soil rich and fertile, and statistics show produces larger crops than any other in the county. The village is small, with business in the past quiet, but this must soon be changed, as the P. & A. C. Railroad passes through this place, which we think would be a good point for a manufacturing company of some kind. It would be a good point for a grist mill. There is one large fruit-drying establishment here, making a good market for what unmarketable fruit there is grown in this vicinity, also giving employment to a large number of operatives in the season. A short distance west of the village we came to the farm of Henry Bartlett, who owns 200 acres of land very pleasantly situated, and where he has lived for 25 years. He has 240 good grade sheep, and raises from 1,400 to 1,500 bushels of wheat every year. We also met such good farmers as E. Bartlett, P. C. Graves, L. H. Tripp, S. Baker, W. Winslow, O. A. Lewis, W. E. Ball, W. J. Reynolds, A. Hilliker, and a host of others who showed their appreciation of the FARMER by cheerfully subscribing for it. Leaving Mr. Cole with a kindly good bye to us and success to our efforts, we hastened on to the pleasant home of Mr. H. Blow, who greeted us very cordially. Of course we looked over his sheep, how could we do otherwise when they are so meritorious? With his accustomed kindness, which is a marked feature in his character, he left his corn planting (was not this cheeky on our part to allow it), and seated himself in our carriage and drove around two days with us. And while the air was balmy, the gentle wind invigorating and the bright sunshine warming the ground and tingling our faces and hands with brown, we viewed the glorious landscape of hill and valley, and gazed upon the bright green of meadow, pasture land, growing wheat, and remembered the promise that there shall be a seed time and harvest. While thus meditating and visiting we are rapidly hastening on to Metamora, which we find to be a pretty village and one of the stations on the D. & B. C. R. R. Leaving this place we again drive over hill and dale, and come to the very pretty home of E. L. Connors, who owns 60 acres of land but works 240 in addition. After a splendid dinner and visit, we go out and look at his handsome bunch of Merino ewes. He, like many others, has the fever, and it culminated last fall when he in company with his neighbor D. Fellows, purchased 13 two-year old ewes of Atwood and Robinson stock, and bred by Merrell Bros., Vermont. Their selection was a good one, as their clip just cut shows an average of 14 lbs. 14-16 oz. average. We find them to be in fine shape and form, with a batch of lambs from Stone's Acme. They will add to this flock this fall, when they intend to take their place among the Michigan breeders of fine woolled sheep. In the distance we see a carriage rapidly drawn by a fine team of roadsters. We know it is not the sheriff or his assistant, as we see the smiling face of Dr. D. F. Stone, of Metamora. Congratulations are quickly passed and adding Mr. C. to our cortege we drove on to the home of David Fellows, who showed us a handsome Fearnought colt, three weeks old, out of Mambrino Gift dam, very sprightly and handsome, also his dam. Adding Mr. F. to our party we drove by many fields where farmers were busily engaged in planting. As we dismounted from the carriages, Dr. Stone took charge of your reporter. He told him that for years he had practiced his profession at Metamora, but believing farming to be honorable and the best business to engage in, he had purchased this farm of 170 acres, which is 3 1/2 miles from the village, four years ago; that a portion of it was low land; that he had brought it to its present standard of excellence, and intended to make it the model farm of

Lapeer County by a thorough system of farming. He showed us where he had put in over four miles of tile, that he had tiled a field in the distance where there was an open ditch, and as we look at it it presents a view of as fine a field of growing wheat as one need wish to look at. He has built two fine substantial barns with solid stone foundations. One of them is 36x70 with basement for stabling; the other is his sheep barn 30x66 feet, which is perfectly complete, with all that tends to their comfort. He also has one 22 by 70 feet for storage of tools, &c. His yards are high and dry, while the water from a drive well, 103 feet deep, is pumped by wind mill, carried to the yard and into the stock and sheep barns. He showed us the place where a new and elegant farm house, the plan of which the architect is engaged upon, is to be built. The doctor also showed us his ram Acme, by Burwell's 23, dam by Burwell's Bismarck 221 and which sheared 31 lbs. three oz. at the Romeo festival, the best record there. We also saw his 22 ewes, bred by Merrell of Vermont, to which he will add largely although he has a fine lot of grades. We next looked at his registered Hereford bull, now nine and a half months old, bought from Mr. Thos. Foster of Flint, and also his one year old and two year old heifers—the latter with a fine six weeks old heifer calf as you ever saw. The two heifers were purchased from the herd of David Clark of Lapeer. He also showed us some registered Berkshire swine that were a credit to any breeder. He showed us some other stock that was more than passing good. The doctor is a perfect enthusiast in his new business, and will not doubt yet have the model farm of the county, and by his example must encourage others to do likewise. We hope to again meet him in the near future. Hiram Lee brought out for inspection a horse colt four weeks old sired by the noted Almont. We know he will not take \$100 for it, for it is certainly a fine one. Robert Glover showed us a colt, two weeks old, from a Sampson mare and one four weeks old, from a Clyde and Messenger mare, sired by Almont, that are remarkably fine. Also 53 grade ewes and his registered buck, whose fleece this season weighed 24 lbs. 14 oz. Mr. Glover came to this county 27 years ago, had no money but plenty of pluck. He now has 160 acres of high rolling land, farm all paid for, well stocked, is the father of eight girls and one boy, all of whom are willing helpers as we can testify.

After a short drive we came to the house of J. W. Miller of Dryden, who showed us his Shorthorn stock bull, but as a full description will probably be published in your paper shortly, we will make no comments. After a hearty supper we returned to Mr. Blow's, where we bid him good bye, much pleased with our trip in Lapeer County. ON THE WING.

Wool Notes.

CONSTANT rains have put back the wool season fully two weeks throughout the west.

ONE of our New York subscribers, Mr. W. H. Norton, of Springwater, N. Y., writes us that buyers are offering 20c per lb. for unwashed fleeces.

Messrs. ELI G. & G. A. PERKINS of Armada, send a report of the shearing of their flock of Merinos. The flock numbered 65 head, and the average of the entire flock was 15 lbs. 6 oz.

In all the States where the clip has yet been placed in the market wool-growers are holding their wool above present views of buyers, and many of them will not sell on present basis of values.

MR. W. H. NORTON of Springwater, N. Y., was one of the parties who furnished the sheep for the recent shipment to Australia. He sold to Mr. Markham five ewes for this purpose, at an average of \$70 per head.

JOSEPH BRIDGE & SON, of Unadilla, Livingston County, announce that their stock ram Nugget, Jr., now six years old, this season sheared 38 lbs. of wool, the fleece being of about eleven months' growth. The ram was sheared May 6.

MR. LEE CHAPEL of Disco, Macomb County, sends the following report of the shearing of his flock: Six yearling rams sheared an average of 18 lbs. 12 1/2 oz.; six yearling ewes sheared an average of 14 lbs. 13 1/2 oz.; six ewes with lambs by their side averaged 13 lbs. 12 oz. Mr. Chapel sent a sample from one of his yearling rams, No. 112 of his flock, which is one of the finest we have seen this season. It is 3 1/2 inches in length, and when stretched the fibre was 5 inches in length. The weight of fleece on this ram was 25 lbs. 8 oz., and the fleece must have been a very bulky one. The yearlings had 400 days growth of wool and the old ewes 30 days less than one year. They were all sheared May 19.

THE June meeting of the Executive Committee of the State Agricultural Society will be held at the Hudson House, Lansing, June 12th, at 8 o'clock p. m. On Wednesday the committee will visit the State Agricultural College, in response to an invitation tendered them by President Abbott.

Horse Matters.

DRAFT AND BUSINESS HORSES.

FAIRFIELD, May 29, 1883.
To the Editor of the Michigan Farmer.

As the raising of draft and business horses is an important and growing industry in this State, any information thereon will be useful to many of our readers. We will not discuss the relative merits of the different breeds of heavy horses, such as the Clydesdale, English Shire, or Norman-Percheron. Our observation, however, is that while there are some splendid teams of the two former breeds in this State, the French stallion is more sure of producing a good cross on all kinds of mares than the Scotch or English. But we wish to say to brother farmers, after you get a good colt then take care of it; give it enough to eat, especially while it is growing. You can not raise a large, fine, well-shaped horse on a scanty supply of food. Far better pinch him in his provender after he is matured and working. The idea that roughing it when a colt renders a horse hardy is a mistake; so is the notion that if a colt is raised entirely without grain he will require less grain when put to service. We do not advocate a forced or pampered growth, but a steady, uninterrupted growth from the start. A colt that loses its shape badly the first year never seems to fully recover it, while one that has always been kept in good shape will, when matured, work and keep smooth and round easier and on less feed. It becomes second nature to him.

L. C. DRAKE.

Take Care of the Colt's Feet.

A correspondent of the *American Cultivator* writes as follows on this most important subject:

"It is said that experience is a good teacher. In many cases it is so; in my own it certainly has been. In my opinion a large number of promising and well bred colts are made to interfere forward from improper management before they are two years old. One of the best bred fillies in New England, one that is sure to trot fast, was injured in this way. Her feet were allowed to grow as they pleased until too late to change the abnormal shape of the leg. This filly will improve by proper shoeing, but will never be perfect, or as she would have been, if more care had been taken of her feet the first year or two. A few days ago I saw a very finely bred colt with one forward foot twisted, with the toe pointed outward and the heel contracted or smaller than the other. This colt is only two years old. I inquired for the cause and was told that it grew out of shape in the pasture. I have no doubt that the trouble was caused in the stable, and the colt was turned to pasture with his foot out of shape.

"For the past two years I have been in the habit of inspecting my young stock every month, and when I see a colt with the feet out of normal shape, with one quarter longer than the other, or the toes growing too long, I at once have the feet put in proper shape by the use of rasps, both coarse and fine. The outside quarter of most colts' feet is thicker than the inside, and seems to grow faster, therefore the toe and outside quarter generally need more rasping to keep the feet level than the inside. There is no doubt but that ringbones are produced and the tendons are injured by the strain that is caused by allowing the toes and quarters to grow to an unsightly length, as is sometimes seen during the winter in many stables. Another source of trouble is caused by allowing colts to stand in manure and filth until they get the cleft of the frog, which is liable to result in contraction at the heels. To keep the feet healthy, the colts should have a yard to run in when the weather is pleasant. The box stalls should be kept dry, clean, well lighted and ventilated, and should be well bedded, so that the feet will not stand on the hard floor. If it pays to breed colts it pays to keep them sound and healthy, and it cannot be done without the best of care, with plenty of good food the first two years especially."

"Rough On Corns."

Ask for Wells' "Rough on Corns." 15c. Quick, complete, permanent cure. Corns, warts, bunions.

The Farm.

OUR FRENCH LETTER.

Enslage and its Discoverer—Parasnis as a Forage Plant—Animal Foods—Pasture—Shortness of the Origin of Cattle Diseases—Shortness of the Origin of Cattle Diseases—

PARIS, May 19, 1883.
M. Goffart, to whom rests the honor of the discovery of the preservation of green fodder in trenches or silos, and known under the name of ensilage, reminds all whom it may concern, that he alone, and no one else is the discoverer of that process, which has revolutionized French agriculture and is in a fair way of effecting the same in several other countries. It was in 1853 that M. Goffart first commenced his experiments, which he continued during eighteen years with varying success. It was, however, only at the moment when he cut or chafed the green maize, treading it closely in the trench, and covering the mass firmly with planks, stones, &c., to exclude the air, that success became established. Austria as well as other nations were simultaneously at work, but Goffart arrived first at the practical solution. He won the honor well, and it is only right to wish that he may live to wear it long.

M. Le Bian, of Brest, continues his crusade in favor of the cultivation of parasnis as a forage plant; where climate and soil suit, and these conditions are pretty general. The root is largely entering into the ration of horses, resulting in an economy of oats; there can be no question as to the importance of parasnis for milch cows it is to feeding cows on them that a large portion of the reputation of the Channel Island butter is due, and the same observation applies to the best butter

of Bretagne, for in the latter country where the brands are inferior, the cause must be attributed to objectionable methods of preparation.

German agriculturists devote much attention to the food and the feeding of animals. In Saxony, ground nut cake has been employed, and also rice flour, in the feeding of milch cows. In both cases the quality of the milk and the quantity of the butter had been improved, while the cattle, relishing both provenders, had a decided preference for the rice flour. At Halle cotton seed cake had been added to the ordinary rations of milch cows, and with beneficial results.

Some of M. Pasteur's countrymen, and several Italian scientists, call in question that gentleman's important discoveries respecting the origin and causes of cattle plagues. That diseases are caused by animalcules floating about us, and only waiting the favorable conditions of humidity, heat and closeness to propagate and develop, is a theory that Pasteur does not claim the paternity. Indeed, readers of Goethe's Faust will find the doctrine there published before Pasteur was born. But the latter claims, and fairly so, to have discovered certain infusions, called microbes, existing in the blood of stock, victims of pests, which by their marvelous fecundity, exhaust the blood of the animal of its oxygen, and so induce death. Further, Pasteur not only introduced these microbes artificially, causing death when they were introduced into the system, but he prepared that very virus in so harmless a form that when employed as a vaccine the cattle inoculated with it remained proof against attacks of the malarial, while stock unvaccinated succumbed. What has not yet been demonstrated is the efficacy of this inoculation for a longer period than six months. Certain experiments will in due course set this point at rest. The French Government has just given an additional proof of its appreciation of Pasteur's life work by doubling his pension, in raising it to 25,000 francs a year.

There are many agriculturists in France more patriotic than practical. They belong to that class of short-sighted individuals who maintain that native breeds of stock if ameliorated can surpass the race of Durhams. Hence the starting point of the angry discussions which rage. A few simple facts suffice to set the dispute at rest. In all the cattle shows held in France they are the pure Durhams or their crosses, that invariably carry off the prizes; every country in the world imports Durhams for breeding purposes, the Chinese being the latest. Where are such Durhams sought? In England, of course, never in France. Again, the small farmers of this country have adopted the excellent habit of saving up till they have a sufficient sum, say 800 francs, to purchase a young Durham bull to serve their cows, and that animal is imported from the cradle of the Shorthorns.

Diseases of Sheep.

We take the following extracts from an address delivered before the Indiana Wool Growers' Association, by J. R. Tomlinson, and commend them to the attention of sheep-breeders:

The sheep is a ruminating animal, and in common with all cud-chewers, has a very complex digestive system, and while its four stomachs do not hasten, but rather prolong the work of digestion, yet that work is more perfectly done in the sheep than in any of our domestic animals. But on account of the complexity of its digestive organs, it is liable to diseases affecting this system. The brain and nervous system of the sheep are smaller, in proportion to its size, than those of any other animal. On this account, they are not capable of great or continued muscular exertion; the circulatory system is also small and comparatively feeble. On account of these peculiarities, sheep are not very subject to active inflammatory diseases; but the power to resist disease or to recover from it when attacked is diminished from these same causes. Indeed a serious attack of disease in sheep too often proves fatal, and especially if it be a disease that makes a drain on the fluids, or in any way depletes the power of the system. This fact must be remembered in the treatment of their diseases. Bleeding or active purging should not be resorted to except in active inflammation, and then cautiously. In the treatment of diseased sheep, all medicine should be given in a liquid form through a drenching horn, or properly shaped funnel. If given concentrated in food it passes into the first stomach, or paunch, where it is liable to be lost.

The chief diseases of the breathing organs are catarrh, or cold; and pneumonia; or inflammation of the lungs. Catarrh is known by profuse running at the nose, often accompanied by a cough. It is a disease of the winter and spring months, and is generally the result of too close and too warm stabling. Sheep need dry bedding and protection from rain, but their health demands a free exposure to the open air. Catarrh is a troublesome, but not a dangerous disease, unless the inflammation extends to the lungs, when it becomes pneumonia, which is generally fatal. This transition is marked by a quick and labored breathing, a frequent hacking cough and a grinding of the teeth together. The discharge from the nostrils becomes yellow; a high fever, loss of appetite and thirst are present. Bleeding and purging with epsom salts is the treatment recommended, but usually death terminates the case in a day or two, under any treatment. This disease is often the result of exposure to cold rains after shearing.

The special diseases of the digestive system are diarrhoea and costiveness. Diarrhoea, or scours, as it is commonly called, occurs generally in the spring when the diet is changed from dry winter food to the tender spring grass. This disease is not generally accompanied with the loss of appetite, nor with fever, and therefore is seldom fatal. The sheep affected with diarrhoea should be separated from the flock and kept in a lot with but little grass on it, and fed with dry feed till the condition of the bowels is corrected. If the disease is stubborn, give an ounce or two of castor oil, and follow it

by two tablespoons of strong oak bark tea with half a teaspoonful of prepared chalk or baking soda in it, morning and evening. Costiveness often occurs when sheep are changed from green pastures to dry food. The animal frequently stretches itself and makes a grunting noise when voiding dung. A little linseed meal mixed with the food will generally relieve this difficulty. A mixture of sulphur and salt placed where sheep can get it, is a good precaution against disturbance of the bowels in this direction.

In the early years of the settlement of Indiana, the sheep died in great numbers from an animal of the leach family, known by the common name of fluke, imbedding itself in the liver and multiplying till that organ is literally destroyed. The eggs, or larvae of these parasites are taken in with impure pond water when the sheep drink. In a healthy sheep, the covering of the eye-ball is a bright red, but when affected in flukes the eye becomes pale, and finally a dirty yellow. The sheep is rapidly reduced in flesh, and in a few weeks dies, apparently from emaciation. A free use of sulphur is the only remedy proposed, and it only succeeds in the early stages of the disease. Since we have drained our swamps and given our sheep good water to drink the fluke is rapidly disappearing.

The Fertilizer Problem.

The *New England Farmer* says on this topic, now being considerably agitated in agricultural circles:

"A good many farmers seem to hold ideas regarding the action of commercial fertilizers similar to those once held by many persons concerning the action of medical drugs upon diseases. They look for some mysterious action in both cases. Farmers are often heard talking about the 'stimulating' effect of fertilizers upon the land. They seem to imagine parallel effects from fertilizer in the soil, and alcohol in the stomach. If alcohol could be shown to be a food for the body or brain, then the comparison might not be a very bad one, but if it is only a stimulant or excitant, the analogy ceases.

"Farmers can not too soon learn that any substances whatever, applied to the soil, which have the effect of making it more fertile, should be looked upon as plant food. They should also understand that plants require a number of simple elements in their food, and that if one or more of these is lacking, then such food will be imperfect. Animal manures are understood to contain all the necessary elements required by plants not found in sufficient abundance in ordinary soils, although there is great variation in the value of different samples of manure. Fertilizers may be made to supplement animal manures—to supply any deficiency in certain elements—or they may be so made as to completely take their place in ordinary farm practice.

"It is conceivable that a fertilizer may be so imperfectly compounded, may contain so great an excess of some one element as to injure a crop to which it may be applied, but there is little danger in this direction. The dangerous elements, if used in excess, are too costly to be likely to get mixed in too large proportions. If either stable manure or phosphates were used last year, in excess of the needs of the crop grown, then we may expect that a considerable portion of that excess will be available for the crops to be grown this year.

"Most of the fertilizers now offered to our farmers, are expected to be fit to use in place of farm-yard manure. The Stockbridge fertilizers are compounded with this object in view, to make a complete manure; so are most other fertilizers which are made from the refuse gathered at the slaughtering establishments. Complete manures can also be made from purely artificial chemicals, but from whatever source the elements may be obtained, the product should be looked upon simply as plant food, and there is to be no danger apprehended from the use of a partial supply from any number of sources. The prime aim should be to keep the soil of our fields fertile, so that any crop can be grown to perfection. Just what can be used in the way of manures or fertilizers that will be most economical, is a problem that each must solve by personal study and experiment."

Bean Culture.

I live in the greatest bean growing section of the world. Some of our farmers grow beans by the hundred acres, and on nearly all farms it is a regular crop. In proportion to the time and labor required, no ordinary farm crop, on the average, affords larger profits per acre. Time was when people thought that beans required poor land. Our farmers do not find it so. Beans are now grown on our best and cleanest wheat soil. If beans are grown on stubble land, or after roots or potatoes or sowed corn, it is of the greatest importance that the land should be clean. For this purpose nothing is better than sowed corn. I have had beans growing side by side in the same field, part of which were on land which had been planted to potatoes the previous year, and part after corn fodder sown in rows and cultivated. The beans after corn were not only a better crop, but the labor of hoeing and pulling was far less than after potatoes. It is no use trying to raise beans unless you are prepared to give them the cleanest and best of culture. The most profitable crop of beans I ever raised was on sod land, plowed the first week in June, thoroughly harrowed and rolled, and the beans drilled in the rows two feet five inches apart, dropping five or six beans in a place a foot apart in the row. All the labor performed on the piece was to cultivate it two or three times between the rows, and to chop out any weeds that came up between the beans in the row.

On stubble land more hand hoeing is required, but whether less or more, the success of the bean grower largely depends on keeping the crop free from weeds. Those who have had no experience in the cultivation of beans as a farm crop would do well to select a piece of dry, warm, sandy land, plow it carefully and harrow thoroughly, and roll it till the land is smooth and level. Then, with a common marker, mark off rows two feet and a half apart, and drop five or six beans in

a place a foot apart in the row. Cover the beans about an inch deep by drawing a little fine soil on top of them with a hoe and patting down the hills smooth and firm with the back of the hoe. As soon as the beans appear go through between the rows with a cultivator, and in a week or less cultivate them again, and follow with hand hoes to remove any weeds that may appear in the rows. The time of planting in this section is from the 1st to the 20th of June. I plant my beans as soon as I can get the land ready after I am through planting corn. In regard to the best varieties for this section I know of nothing better than the medium bean, Boston marrow or White Mountain, pea bean and white kidney or royal dwarf. These are all white beans and there is nothing better either for market or for home use.—Joseph Harris.

Parsnips for Cows.

The *American Cultivator* says: "Those farmers who have not yet adopted the ensilage system of preserving green food for winter use, and who use roots instead, should bear in mind the claims of parsnips as a cattle feed. It is one of the most nutritious of roots, and can be grown without more trouble than carrots. We have never had much cows increase in milk or butter production much faster upon any extra feed than when a peck of parsnips was added daily to their ration of hay and grain. Parsnips may be sown any time in May, if the ground is fitted, as it always should be for root crops, by being deeply plowed, well manured and finely pulverized. They should be sown in drills about fourteen to eighteen inches apart, and the seed covered about half an inch deep. When two or three inches high thin to six inches apart, and keep well hoed. Do not harvest in the fall, but allow them to remain in the ground until spring, and when the beets, mangels, turnips, small potatoes and the like are all consumed, and the 'spring appetite' of the animal begins to crave the green grass which has not started, then dig your parsnips and feed them out. One great advantage of the parsnip is that it will winter perfectly well in the ground, and will be in its best condition at a season of the year when the animal most needs roots, and when other varieties have either decayed or lost much of their value as feed, if indeed you have been able to keep them at all."

Agricultural Items.

A FARMER complains that he has completely stopped his hens from laying by feeding amber cane seed.

It is a common mistake to plant beans too early. The bean is a hot weather plant, and it is worse than useless to plant till the ground is well warmed.

A good horse power on a farm will each year save many times the interest on its cost in furnishing power to do a great many things that would else have to be performed by hand, such as sawing wood, cutting feed, grinding grain, etc.; and with proper care it could be made to last for years.

Drained land dries out so soon after rain that labor is detained but little, and seed in such condition never rots in water-soaked soil. It will also stand the drought better. Even the most unobtrusive farmer has noticed that loose soil will not dry and bake as deeply as hard soil. Drained land never gets wet enough to form mortar and when it dries becomes like adobe brick.

W. B. LAZENBY says: "Potatoes draw heavily upon the fertility of the soil. They are however a good crop to grow, because if they cannot be sold they may be turned to good account for feeding stock. The large amount of potatoes used in starch manufactures creates a shipping demand, and except in seasons when there is an over production, they will bring fair remuneration to the grower."

CHARCOAL has considerable manurial value, especially if applied on rich ground, the amounts of which it absorbs and gives out as the plant roots require. It also improves the mechanical texture of the soil whether light or heavy, and its dark color holds the heat from the sun, making the land warmer and early. The remains of old charcoal pits always make the best land in the field for many years thereafter.

A CORRESPONDENT of the *N. Y. Tribune* says: "When I was young I brought a bottle of English wheat from that country as a present to a farmer friend here. The farmer admired the beautiful large grains but said they would not grow as the variety. He sowed it, but it did not germinate. Since that occurrence I have chosen to keep seeds in paper bags in a cool interior closet of the house, and have made no further experiment in sowing seeds for keeping."

The same authority says: "My rule for cutting timothy is, when it is in its very best estate, if possible, and that is when the major part of the field is in bloom. Some of the seeds then are in milk, and some of them, perhaps, before I am through, for I never cut my grass wet or dry, because I am ready, as some do, but my rule is to begin the first day after I think the grain is ready, and when it is most abundant in the stalk and leaves, and hurry on the work as fast as possible during the dry weather, and while there is plenty of hot sunshine. I never cut grass for hay when it is wet from much dew or even a little rain."

HON. J. D. NELSON, in his address before the annual convention at Indianapolis, said: "Good, clean, bright timothy hay, cut and cured at the proper time, has a peculiar aroma that is as grateful to the human nostrils as to the taste of the brute creation; whereas, if cut when wet, and rained upon when partly cured, and then partly dried and rained upon again, which is too commonly the case, requiring several days to fit it for the barn or stack, it is musty, tasteless, and without substance or value. The only way such trash can be made useful is by boiling for stock, and hence into the manure pile, for which it is worth somewhat more than straw."

I had a severe attack of gravel and kidney trouble; we were unable to get a medicine or doctor to cure me until I used Hop Bitters, and they cured me in a short time.—A Distinguished Lawyer of Wayne Co., N. Y.

Backache, stitches in the side, indigestion and soreness of the bowels, are symptoms of a disordered state of the digestive and assimilative organs, which can be promptly and thoroughly corrected by the use of Ayer's Cathartic Pills. As dinner pills, and aids to digestion, they have no equal. They cure constipation.

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For the prevention and treatment of Diphtheria, Scarlet Fever, Small Pox, Yellow Fever, Malaria, etc., etc.

The Free use of the Fluid will do more to arrest and cure these diseases than any known preparation.

Darby's Prophylactic Fluid, A safeguard against all Pestilence, Infection, Contagion and Epidemics.

ALSO AS A GARGLE FOR THE THROAT, AS A WASH FOR THE PERSON, AND AS A DISINFECTANT FOR THE HOUSE.

A Certain Remedy Against All Contagious Diseases.

Neutralizes at once all noxious odors and gases, destroying the germs of disease and septic (putrescent) floating imperceptibly in the air, such as have effected a lodgment in the throat or on the person.

Perfectly Harmless used Internally or Externally.

J. H. ZELIN & Co., Proprietors, Manufacturing Chemists, Philadelphia, Pa.

Price 50 cents per bottle. Pint bottles \$1.

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"You claim too much for SAMARITAN NERVE."

It is a specific for Epilepsy, Dyspepsia, Alcoholism, Rheumatism, Spasmodic, or Seminal Weakness, and fifty other complaints. We claim it a specific, simply because the cure of all these diseases arises from the blood. Its Nerve, Resolvent, Alterative and Laxative properties meet all the conditions herein referred to. It is known to the world.

THE GREAT NERVE CONQUEROR.

It quiets and composes the patient—not by the introduction of opiates and drastic cathartics, but by the restoration of activity to the stomach and nervous system, whereby the brain is relieved of morbid fancies, which are created by the causes above referred to.

To Clergymen, Lawyers, Literary men, Merchants, Bankers, Ladies and all those whose sedentary employment causes nervous prostration, irregularities of the blood, stomach, bowels or kidneys or who require a nerve tonic, appetizer or stimulant, SAMARITAN NERVE is invaluable. Thousands proclaim it the most wonderful invigorant that ever sustained the sinking system.

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IS A SOVEREIGN REMEDY FOR ALL COMPLAINTS SPECIALLY FOR WOMEN.

HUSBANDS OF WIVES, MOTHERS OF DAUGHTERS, SHOULD KNOW ABOUT IT.

Information and Testimonials FURNISHED, MY PAMPHLET ON "Diseases of Women & Children" Sent gratis. Every woman, especially Mothers, should read it. Address: R. F. PENNELL, M. D., 110 Walnut Street, KALAMAZOO, MICH.

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The best and most economical fertilizer known. Send for prices and pamphlets giving testimonials.

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\$5,000 REWARD! Beware of Counterfeits!

The high reputation of Adams' Botanic Cough Balsam for the cure of Coughs, Colds, Asthma and Consumption has given rise to spurious imitations. The genuine Adams' Botanic Cough Balsam is prepared only by Frank W. Kinsman & Co., sole proprietors, Augusta, Maine. To protect yourself from imposition examine the bottle and see that the name of F. W. Kinsman, Druggist, Augusta, Me., is blown in the glass of the bottle. A reward of \$5,000 is offered for a better article. We also offer a reward of \$10,000 to the proprietor of any remedy showing half as many testimonials as the genuine cures of Asthma and lung disease in the same length of time.

From George W. Martin, M. D., Graduate of University of New York, "Aristocrat Surgeon and Medical Institutions," "Bellevue Hospital," and "New York Ophthalmic Hospital,"

have been "blown out" in Pennsylvania, in consequence of the dull state of the iron market.

In addition to the \$100,000 left to the Cooper Union by Peter Cooper in his will, his heirs will contribute during the present year \$100,000.

Josh Billings is sixty-six years old, and has collected thirty thousand dollars from his non-sensical "Farmers' Almanac" in the last ten years.

Julius Butzer, teacher in St. Bridget's school, Cleveland, has been arrested on a charge of seducing a scholar to render him a cripple for life.

The cologne at Philadelphia for May was 2,600 gold dollars, 1,000,000 silver dollars, 530,000 dimes, 2,550,000 five cent pieces, and 3,160,000 cents.

According to the United States Commissioner of Education the private gifts for educational purposes in this country exceed \$6,000,000 a year.

The grand stand at Waterbury Conn., fell during a base ball game last week, severely injuring one man and slightly injuring several others.

The union theological seminary, New York, has property worth \$1,730,000, and is probably the wealthiest institution of the kind in the country.

Anthony K. Henderson, of New Castle, Pa., recently deceased, bequeathed to Cleveland \$200,000 for the founding of an industrial school.

The virtual disbanding of the revolutionary army by Washington one hundred years ago was celebrated at Fishkill-on-the-Hudson on the 24.

A fire at Lynchburg, Va., on the 30th ult., destroyed \$500,000 worth of property, and five men were buried under a falling wall, and instantly killed.

Mrs. Langtry, so the gossip say, is about to apply for a divorce. She is said to make her husband an allowance of \$25 per week. Gen. Langtry.

Four incendiary fires, aggregating a loss of over one hundred and twenty thousand dollars, occurred in Minneapolis in a single night last week.

The authorities of Harvard College had a hot discussion over the question of taking L. D. to Ben Butler's name, and finally decided they wouldn't do it.

Gen. G. P. Buel, who recently had part of his jaw removed, in consequence of injuries received by being thrown from a horse, died last week at Nashville, Tenn.

Michael Cleary, pugilist, says Philadelphia's mayor and Lieut. Abbott, of the police, for \$5,000 damages for preventing his sparring exhibition with Sluggo Sullivan.

The Chicago bricklayers' strike has ended in a compromise, the bosses agreeing to pay four dollars per day, the men agreeing to modify certain objectionable union rules.

Gov. Butler has refused to sign warrants for the payment of the pay rolls of the various State institutions, and there are hints that steps will be taken to compel him to do so.

It is said that the immigration this season is much less than last. From January to May 30, last year, the arrivals were 218,880, this season, 167,992, a decrease of 50,877.

An order from the Postmaster General directs postmasters of the first and second class to heretofore give personal attention to their office, under penalty of liability of removal.

The bottom of one of the reservoirs of the Knoxville (Tenn.) waterworks dropped out (into a cave) last week, and in five minutes was emptied of five hundred thousand gallons of water.

It is rumored that officials in charge of the department of tax collections at Havana have substituted false for genuine receipts, aggregating \$1,000,000. An investigation has been ordered.

At St. Louis, Mo., Matt Lewis, who has been convicted four times of murdering his wife, and sentenced three times to be hanged, has been granted another stay of execution from June 5 to 20.

W. T. Walter, mail carrier in Texas County, Mo., has been arrested for robbing the mail of registered packages. He was arrested at Cuba, Mo., and his father was committed to an accessory.

The three-mile sculling race between Edward Hanlan, of Toronto, and John Kennedy, of Portland, Me., for \$2,500 a side, took place near Boston on the 31st ult., resulting in an easy victory for Hanlan.

It is rumored that Postmaster General Graham is going to reorganize his department, weeding out the inefficient and those holding their positions by favoritism, and organizing according to efficiency.

Margaret Graham, 30 years old, a homeless woman, attempted to drown herself and two children in East River river at New York last week. They were all saved. The woman was made desperate by destitution.

A railroad land grant decision just rendered by Secretary Teller against the recent appeal of the Central Pacific Railroad Company from the refusal of the commissioner of the general land office to proceed with patenting lands to the Central Pacific Company as successor of the California & Oregon Railroad Company of California.

Differences between striking workmen and iron manufacturers at Pittsburg, have been settled by concessions by the latter. At Cincinnati, however, five of the leading iron firms declined to sign the scale and closed their mills, throwing between 4,000 and 5,000 people out of employment.

Foreign.

Dr. Gabriel Valentine, the distinguished German physiologist, died at Bern, Switzerland, last week.

The loss by the fire at Paris last week is reported to exceed \$7,000,000, and over 1,000 persons are homeless.

The grand jury has found true bills against the American dynamites, the two Gallaghers, Whitehead, Dalton, Curry, Ansborg and Wilson.

Dispatches from London say belief is general in diplomatic and commercial circles that a rupture between Germany and France is imminent.

The Duke of Albany asked Gladstone to appoint him Governor General of Canada, but the Premier replied the Duke was too young and lacked experience.

Patrick Ford, of the Irish World, proposes to send one thousand dollars to the family of each man convicted of complicity in the Phoenix Park murders, and he appeals to the public for aid in carrying out this purpose.

There were great riots in St. Petersburg last week, in consequence of the Czar having ignored the popular demand for reforms. The streets were thronged with rioters whom the military were called out to suppress, and many arrests were made.

There were three days of steady fighting last week between the forces of the Afghan and the British Government, and the British Government has arrived at an understanding in regard to the construction of a second canal across the isthmus, but the arrangement must receive the approval of the committee of the company before it can be carried out.

Farrell, one of the informers in the trials of the Phoenix Park murderers, has received five thousand dollars from the government, and Michael Kavanagh, the criminal, another informer, \$1,250. Both will quit the country, James Carey, the informer, and his brother, Peter will receive small sums for their services.

The French commander in Madagascar has been instructed to withdraw his forces from that country only after Queen Ravalomanana has recognized the French protectorate specified by the treaties of 1840. The Admiral will insist on the right of Frenchmen to own land in Madagascar, and will claim an indemnity of one million five hundred thousand francs for the cost of the expedition.

Ayer's Sarsaparilla is a highly concentrated extract of Sarsaparilla and other blood-purifying roots, combined with iodine of potassium and iron. Its control over scrofulous diseases is unequalled by any other medicine.

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NEW ADVERTISEMENTS.

NEW ADVERTISEMENTS.

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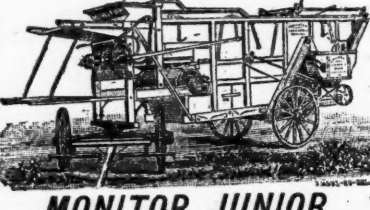
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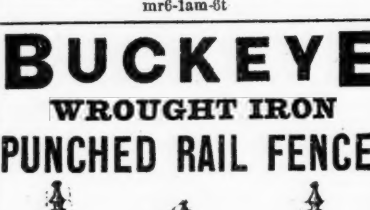
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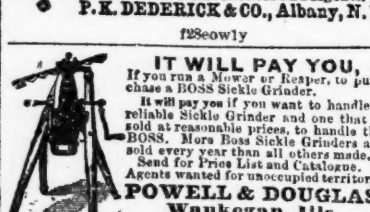
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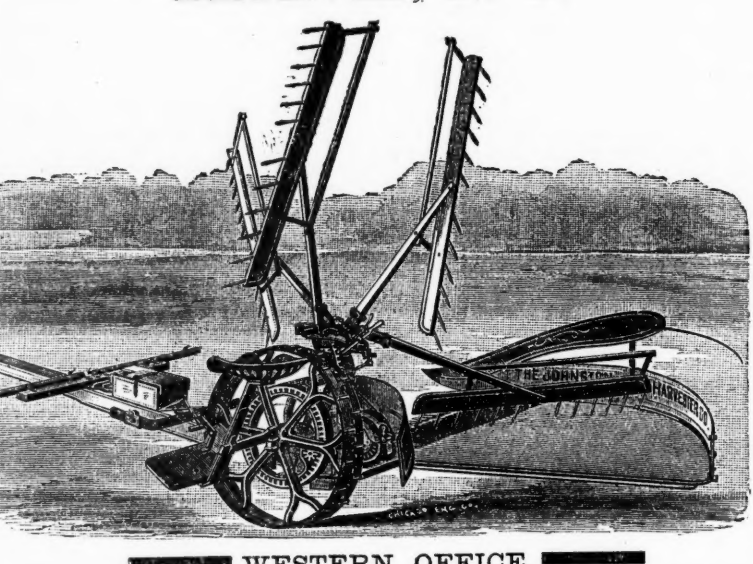


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IT WILL PAY YOU.

WATER-PROOF BUILDING MANILLA.

THE JOHNSTON HARVESTER CO.,
Manufacturers of
Reapers, Mowers, Harvesters & Binders.
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Poetry.

THE TRAVELER AT SUNSET.

The shadows grow and deepen round me;
I feel the dew-fall in the air;
The muzzin of the darkening thick
I hear the night-thrill call to prayer.

The evening wind is said with farewell,
And loving hands unclasp from mine;
Alone I go to meet the darkness
Across an awful boundary line.

As from the lighted hearth behind me
I pass with slow, reluctant feet,
What waits me in the land of strangeness?
What face shall smile, what voice shall greet?

What space shall awe, what brightness blind me?
What thunder roll of music stuns?
What vast processions sweep before me
Of shapes unknown beneath the sun?

I shrink from unaccustomed glory,
I dread the myriad-voiced strain;
Give me the unforgetful faces
And let my lost ones speak again.

He will not chide my mortal yearning
Who is our Brother and our Friend,
In whose full life divine and human
The heavenly and the earthly blend.

Mine be the joy of soul communion,
The sense of spiritual strength renewed,
The reverence for the pure and holy,
The dear delight of doing good.

No fitting ear is mine to listen
An endless anthem's rise and fall;
No curious eye is mine to measure
The pearl gate and the Jasper wall.

For love must needs be more than knowledge;
What matter if I never know
Why Aldebaran's star is snowy
Or colder Sirius white as snow?

Forgive my human words, O Father!
I go, Thy larger truth to prove,
Thy mercy shall transcend my longing:
I seek but love, and Thou art Love!

I go to find my lost and mourned for
Safe in Thy sheltering goodness still,
And all that hope and faith forebode
Made perfect in Thy holy will.

—J. G. WASHNER.

A LITTLE SUFFERER.

I'm taking out my Claribel

This morning for an ailment;

She has been sick so very long;

We both have found it wearing.

She's had the measles and the mumps,

And all since last December,

Sides several over sicknesses

Whose names I can't remember.

I've had her vac-cin-ated, too,

And oh! the scar it's leaving!

But all those things are nuffa to

The time when she was teething.

I sat up all night with her;

She grew worse fast and faster;

I gave her polygallie, and

Put on a mustard plaster.

She's been so patient and so sweet,

I love to kiss and pet her,

Poor child, she's suffered everyting!

But now the darling's better.

I hope the air will do her good;

"Dear, don't kick off your cover,"

I've been so anxious, no one knows

Or feels it like a mother!

Miscellaneous.

A MINING STORY.

BY KATE KIRK.

"Eureka Gold Mining Company." Don't it look important on paper? I tell you, boys, we've got a good thing, but we must work!" said Tim Flynn, glancing at the piece of paper in his hand.

"Yes," replied Joe Bagly with a sleepy yawn, "but let's go to roost now. We can't do anything more to-night."

The men, eight in number, had been sitting around a camp fire discussing their prospects. The Eureka mine originally belonged to a party of Eastern capitalists who, having worked it for a short time and finding it did not "pan out" according to expectations, sold their interests to the men who had just taken possession of the property, which they firmly believed would prove an El Dorado. They were poor in purse, for they had invested their all in the new venture, but were rich in hope and courage.

"It is a well known fact," Flynn would assert twenty times a day, "that the Eureka is on a range with the famous Empire, which yields as high as \$30,000 per ton, and we are sure to strike the same vein. Some day we will wake up to find ourselves millionaires. It is only a question of time."

The next morning seven of the men, who were the actual owners, began work, leaving Si Reed, whom they termed the silent partner, to do the chores about the camp. Reed was pale and thin and had an anxious, expectant look upon his face. He seldom spoke to anyone, which fact had gained him the sobriquet of Silent or Si. Reed was devotedly attached to Flynn, who had befriended him while in Sacramento, and exhibited such sincere grief when he heard of his intended departure for the mines, that Flynn invited him to join the party.

The miners worked like beavers, delving down into the earth that each felt certain held in her virgin bosom the gold which would enrich them. They began their labors at the first streak of dawn, toiling unceasingly through the entire day, each dreaming his own dream of future greatness. Weeks sped by; pan after pan was washed, the contents examined, then thrown aside. But they were not disheartened. The gold was there. The next blow of the pick might reveal it.

One evening, after supper, Joe Bagly said: "How's the fodder, Si? Last another week, eh?"

"No, hardly enough for another week." "You must put us on low rations then. What d'ye say, boys?"

"Agreed," they answered in chorus. The next day when Si gave each man his portion, they laughingly declared that Flynn had received the lion's share, which was true; for Reed had robbed himself in order that his friend should have his usual supply, albeit no one suspected the bit of self-sacrifice. The week was stealing away and they had not "struck it." The hearts of the miners were growing heavy with dread. Yet they dared not give vent to their fears. Each felt that success depended upon his individual

courage, and no one was willing to dampen the ardor of the others by expressing doubts of their ultimate triumph. One day, while seated on the ground eating their midday meal, a little girl appeared before them.

"Holy thunder!" cried Flynn, springing to his feet, "where did you come from?"

"Please, sir, I've bin walking ever so far. Ma saw yer camp-fire last night, and told me how to git here. She couldn't come herself, 'cause Freddie's sick. May I sit down? I'm awful tired."

She glanced timidly at the men, then at the empty pot in which the dinner of beans and bacon had been cooked.

"Where does your ma live?" inquired Bagly.

"She doesn't live nowhere. We're a huntin' for pa."

"Did ye expect to find 'im here?"

"No, sir, but we're hungry, and ma thought you'd give us somethin' to eat."

The men roared with laughter. Something to eat, when they had just devoured their last cut of bacon.

"Not another mouthful, boys. We must give the chick what's left," said Bagly, scraping the remains of each dinner into his own tin plate. "Here, little 'un, eat this, and when you've satisfied the cravin's, ye can tell us where ye come from."

"Please, I'd rather take it to Freddie," pleaded the child, "cause he's little an' sick."

"Ye ain't bigger'n a pint of cider yerself," laughed Bagly. "Eat it, an' we'll give ye some for the others."

The promise satisfied the child, who quickly devoured the contents of the dish. "Been on low rations, too, I reckon," chuckled one of the men.

"Now tell us about your mother. Where is she, and whose trail is she on?" said Flynn.

"She's way down there in an old log-house where nobody lives. We was going to Kiwanna camp, 'cause we heard pa was there, but Freddie took sick, and ma's afraid he'd die; so ye'll please give me some wittles I'll go back, 'cause she alone."

"What'll we do, boys?" asked Bagly.

"We can't leave the critters there; some of us must go with the chick and bring them home."

"Reed can be spared," suggested one of the men.

"Bah!" interrupted Ben Skinner, a surly, ill-natured fellow; "Reed, with his white face, that grows whiter every day! If the woman saw him she'd think death had come for the youngster sure."

The men glanced toward Si, who was leaning against a tree, apparently oblivious of what was going on around him, and evidently did not hear the unfeeling remark.

"Look here, boys," remarked Flynn, gravely; "our larder is about empty, and we must replenish it. Let's draw lots to decide who will ride into town for provisions. We are out of funds, but this," taking a valuable watch from his pocket, "can be left as security."

"And this can keep it company," said Bagly, producing a handsome pistol.

Skinner drew the slip of paper upon which the word "go" was written.

"The little gal can sit before ye, and ye can stop at the cabin and give this the last of our hard tack, to the woman," said Bagly.

One of the men came forward with a flask of whiskey, which he asserted would "straighten out the little chap." Fleet-foot, their only horse, was quickly saddled, and Skinner started on his errand.

"Tell yer ma to fight her luck a few hours longer, and when supplies come we'll give ye a rousing supper," shouted Bagly, as they rode away.

When some distance from the hut Skinner put the girl down; gave her the biscuit and flask after drinking half its contents, and resumed his journey.

In the evening Flynn and Bagly went over to the hut intending to bring the woman and her children up to camp.

"Skinner will get back about 8 o'clock. I guess the sick boy only wants a little feeding up to make him all right," remarked Flynn as they approached the hut.

They found the woman seated on the floor with the boy on her lap, and Maggie, their late visitor, at her side sound asleep. With tearful sobs she related her sad story. About five years before, or when Freddie was only a few weeks old, her husband left to join a party of prospectors who were going to the Sierra Nevada region, and she had never heard from or seen him since. She waited until her funds were nearly exhausted, then made her way to Sacramento. While supporting her children as best she could, she learned that the party had broken camp; her husband had been brought to Sacramento and placed in a hospital where he remained a long time seriously ill with brain fever. She traced him to the hospital only to find that he had gone away again; no one could tell whether he was still alive or not.

Recently she learned that a man answering his description, and bearing the same name, was working in the Kiwanna mines, and she was on her way there. He had always been a fond husband and father, and she believed he had searched for her also, but they had missed each other.

The suggestion fell like a bombshell; no one spoke for a moment, then Bagly resumed:

"He's got your watch, Flynn—my pistol and Fleet-foot. He's gone sure as shootin'. I saw the devil a shinin' in his eyes when he drew the slip."

The others were loth to accept their comrade's suggestion, but all crept to their resting-places with heavy hearts.

"We kin live on beans," muttered Bagly, "but what in thunder will become of the woman an' her kids?"

In the morning there was considerable excitement in Eureka camp. Two of the men, Bagly and Reed, were missing. After a protracted search the latter was found near a clump of bushes some distance away from an unconscious state, having apparently fallen in a fit. They carried him back to camp, laid the limp form on a bramble bed and gazed at each other in blank dismay.

"Call the woman; p'raps she'll know what to do," advised Tom Knowles.

The woman did not wait to be called. Seeing that something was amiss she approached the group. The next moment a heartrending cry burst from her lips. Falling upon her knees she threw her arms around the sick man and kissed his still white face in a wild, distracted way. A slight tremor passed over Reed's frame. He opened his eyes, looked wistfully at the woman bending over him. Then a gleam of intelligence illuminated his countenance; he recognized the faithful wife from whom he had been so long separated by a singular freak of fate. For one brief moment soul met soul. He raised his hands heavenward, murmured faintly, "Up there, Maggie," then earned his sobriquet of Silent Reed.

A solemn stillness prevailed around Eureka camp when Flynn and his comrades returned from their unsuccessful search for Bagly. The remainder of the party were sitting around in despondent attitudes, when Mrs. Reed, with the sick child on her knees and one hand fondly resting on the dead man's face, looked the very embodiment of inconsolable grief. Flynn—tender-hearted Tom Flynn—how his burly frame shook with sobs as he touched death-scene was described to him.

"Boys," he said huskily, "we must face our hard luck like heroes. I have insisted all along that the Eureka held a fortune for each of us, because I believed it. But—" it cost him a struggle to utter the next words, which were the extinguishment of the hope that had enabled them to endure privation and hunger without a murmur.

"But," he went on, "I was mistaken. After that poor creature has grown accustomed to her sorrow we will bury poor Si and pull up stakes. We won't abandon them, boys. For his sake we must protect those he loved."

The others heartily agreed to the last clause. While arranging their plans for the future, little Maggie bounded down the hillside singing blithely, unconscious of the bereavement that had befallen her.

"Look!" she shouted gleefully, "what nice stones I have found. Full of bright specks jes like eyes."

Flynn took the stone she held toward him. His face, rough and weather-beaten, grew pallid with sudden joy.

"Boys," he whispered, in a tone of suppressed excitement, "she has 'struck it.' Where did you find this, Maggie?"

"Way up there, past the big hole," she replied, vaguely wondering at his white face.

In a moment the men fell into line, Maggie leading the way to the spot where she found the precious stone. As they passed the mouth of the pit, the scene of their fruitless labors, Flynn stopped to get a shovel. The others followed his example, carrying with them the implements they had cast down in a hopeless way the night previous. They set to work silently, being too much excited to speak. If disappointment awaited them now! No, two or three blows, such as had never been dealt before, told them that they had "struck it" at last. They paused, looked at each other for a moment, then the hills echoed and re-echoed with the shout of triumph that burst simultaneously from their lips.

They returned to camp, Flynn carrying Maggie on his shoulder, just as Bagly appeared in sight with a bag of provisions on his back. In a few words he explained how, before day-light, he had started for Kiwanna to bed food for the woman and her children. After a hasty dinner some of the men went to select a pleasant spot in which to lay the remains of their comrade, and Flynn set out for town to make arrangements about having the camp supplied with provisions.

Several hours later he returned in high spirits and related how he had encountered Skinner in a tavern, and demanded the return of the horse, watch and pistol that had been entrusted to him. He blustered and swore awhile, and finally agreed to sell his claim for the articles he had already appropriated to his own use. Flynn did not apprise him of the lucky turn of Fortune's wheel, but took precautions to have the exchange legally drawn up and signed.

"He played us a mean trick," concluded Flynn, "but I got the best of him, and now I propose to transfer his share to the orphans and widow of our old friend."

No dissenting voice was raised against the proposition; furthermore they all declared that Maggie should henceforth be called the Ward of the Eureka Mining Company.

The next day Si was buried, and a week later, when the success of the mine had become an established fact, Mrs. Reed and her children were taken back to Sacramento. The sudden change of fortune, coupled with the death of her husband, proved too much for the poor woman, and the two orphans became the actual wards of the Eureka Mining Company.

COLORLESS AND COLD.—A young girl deeply regretted that she was so colorless and cold. Her face was too white and her hands and feet felt as though the blood did not circulate. After one bottle of Hop Bitters had been taken she was the rosiest and healthiest girl in the town, with a vivacity and cheerfulness of mind gratifying to her friends.

AN OLD WOMAN'S STORY.

Many years ago a girl and her great grandmother sat together—the girl in tears. Said great grandmother Hudson, sitting very straight, not looking at her eighty-eight years, as did her great-grandchild of eighteen:

"Young folks think old folks are fools, but old folks know that young folks are." "That is because you're old, grandma," sobbed Linda.

"No; it is because I was once young," said the old lady.

"But he is the only one I shall ever love," said Linda. "Papa is cruel to me. Why does he think ill of Lewis? He knows nothing about him. I shall die if we are separated."

"I was going to die, too," said great grandmother, "but I didn't."

"Oh, tell me, please," cried Linda, "had you a lover; did they separate you? I never knew you had a love story—that is that kind of one."

"Yes," said the old lady. "I had a lover. You can have many lovers, but never more than one father and mother. Folks think of that when it's too late. When father said that Cecil was Lord knows who, and he should not come to see me, I remember I almost hated him for it. When mother said she didn't like him either, I almost hated her. Cruel creatures that stood between me and my young lover—that was what my parents seemed to me then; and I was worse than you, my dear, ever so much worse, for it seemed wicked to me that any one should take it for granted a man was not worthy of love because he was a stranger, and I made preparations to run away with Cecil and marry him at Gretna Green. Everything was ready; I had my jewelry in my bosom and my little bundle on my arm, and was creeping out of a side door that led into the garden when a hand came down on my shoulder and a voice cried out:

"My girl, is this the way you use us?" and there was my father.

"My father's face was white as a ghost and his hand shook as he held mine."

"O father, father! I cried, 'if you would only let me have my way in this one thing. You can't make a girl love or hate by saying so.'"

"He stood holding me firm and fast. 'It is Elinore who has betrayed me,' I said; and though they would never admit it I knew the maid had proved false."

"Well, they looked me up in my room. How often I cried out, 'I shall die if I am separated from Cecil.'"

"I am very old, but when I think of it the old pain comes back again. His eyes were like black diamonds, and he had an olive cheek and full red lips, and your men with padded shoulders and thin arms and legs and hollow chests wouldn't look like men, standing beside him."

"It was a dreary time and my health broke down under it. I had a fever, and when I was well again the doctor said I must have a change; so mother decided to take me to the seaside; but first we were to go by stage-coach to London and visit an aunt I had there."

"It was the day of stage-coaches and the day of highwaymen."

"Going over a certain common on our way coaches had more than once been stopped. The men were armed always, and the women trembled when they saw horsemen riding towards them."

"Your money or your life," was their word, and they kept it."

"If we should meet the highwaymen," said my mother; but I was not afraid. I didn't care whom we met or what happened to me."

"We rode away from our home in the bright daylight and stopped for dinner and to change horses at an inn; then we rode on again. It would be night long before we reached London. I sat in the coach with my head on my mother's shoulder, thinking of just one thing—Cecil. Should I never see him again—never, never, never? Would he not follow me and carry me off by force? Could I not somehow let him know and escape from my aunt's house and be married, so that no one could part us? Oh, I was so miserable—miserable. Nothing like making plans that can come to nothing and burst like bubbles when we have thought them out, for wretchedness."

"The afternoon faded out and the sun set. The moon rose."

"See what a lovely moon!" said my mother. But I had not cared to look at the moon since I saw her over the garden wall that night I tried to run away. Rumble went the coach, crack went the whip."

"Suddenly there was a tumult."

"Gentlemen," cried the guard—"gentlemen, I'm afraid we are to have some trouble here. See to your weapons, gentlemen!"

The shrieking women clung together. Four masked men rode to the door. The coachman and guards lay in a ditch. One of the gentlemen was bound; the other was old and lame. They were rifling his pockets while he was screaming. They took out a gold watch, a purse, and his snuff-box with diamonds on it. They had already the other's money."

"Then one—the largest and handsomest figure—bent over us."

"Don't fear, ladies," he said in a soft voice. "All we want is whatever valuables you may have about you."

"Mamma began to scream."

"The lady who sat next to her fainted."

"We could not see the man's face, for he was masked, and we were in the shadow of the coach."

"Something shines on your finger," he said; "let me see it."

"He caught at a chain on which I wore a locket with a curl of Cecil's hair."

"Don't take that!" I cried. "Don't take that!"

bound and one lay bleeding. This last one was Cecil.

"I knew now that my father had not been wrong. Cecil was even worse than he thought him. He was a highwayman, a bad man and the companion of bad men—a creature who cut purses on the public road."

"They were not all ignorant men, these highwaymen, by any means."

"Many had good birth, education and manners. Yes, a bad man! But how could I hate him all at once? I understood that my father had been right in parting us; but those lips had kissed me—those hands held mine."

"The ladies need fear no longer," said one of the gentlemen. "Those fellows are not in a condition to molest them."

"Then he said (men don't say such high-toned things now): 'How merciful is the gentler sex! It is compassionate to the erring as well as the virtuous.'"

"For I had torn my hand from my mother's, and knelt beside Cecil."

"They thought I pitied a wounded robber—that was all; but this is what he whispered in the darkness:

"Amy, you know what I am now; but I love you."

"And I answered: 'Cecil, I hate you deeds without hating you.'"

"Those were the last words we ever spoke to each other—the very last."

"Did you never see him again?" asked the girl. "O grandmother! never again!"

The woman looked into her eyes.

"He was a very bad man, my dear," she said, "very bad; and I never saw him again. I believe he died a shameful death one day at the hands of the executioner. But you see, it was because I have been young, not because I am old, that I said you young folks were fools."

"It was a good while—yes, a good while—after that night in the stage-coach before I came to my senses sufficiently to thank dear papa for his watchfulness over me, and he really glad that I had never been Cecil's wife; but I did at last, my dear—I did at last; and I married my good husband, your great grandfather—whom you never saw; and we were always happy. The heart of woman is a mystery and has been since Eve, my little girl."

The Rebel Ram Manassas.

The history of the ram Manassas and of her projector and commander should be placed upon record before it is too late to get the truth. John A. Stevenson, a wealthy retired sea captain, was living in New Orleans at the breaking out of the civil war, and the Manassas was wholly his conception and invention, and it was put afloat entirely at his cost and expense.

Before the battle of Bull Run he purchased the Enoch Train, which had been constructed in Boston and used as a tow-boat on the Mississippi River. She was a double propelled, with two engines and powerful machinery, 180 feet long, 22 feet beam, 8 feet hold and about 96 tons burden. He took off her houses, cut her to her plank-sheers and then first put on an arched deck of heavy timber, completely covering her from stem to stern in the shape of a turtle's back, plating the whole with two thicknesses of railroad iron, bent and fitted so as to form a smooth surface over the whole outside of the water's edge. Two short smoke-stacks alone protruded above the even surface of the whole outside. The prow was constructed with heavy iron projecting in front about 5 feet, 3 feet under water. She was steered by a wheel entirely covered under the deck. In case she should be boarded by the enemy it was so arranged that hot water could be thrown in streams upon the boarding party. The construction of such a novelty at New Orleans attracted public attention. It was visited by many hundreds of people, was generally ridiculed by the public. But Stevenson was strong minded, had faith, had money, and was encouraged by his friend, Captain Charles William Austin, now a resident of Savannah, Ga., who superintended her construction. It is from him that all the facts herein mentioned were obtained. When completed, which was soon after the battle of Bull Run, the next thing was to obtain a crew. Federal gunboats, heavily armed, were lying at the mouth of the Mississippi, and it was there which it was intended she should attack. Commodore Hollins, the Confederate naval commander at New Orleans, refused to detail men for service in her, but gave consent to Captain Austin to obtain volunteers, if he could, from out the navy. Nineteen were obtained. With these the Manassas proceeded to Fort Jackson, twenty-two miles above the blockading squadron. Commander Hollins allowed Stevenson and Austin the use of his despatch boat Iva with which to reconnoitre the enemy in the afternoon, preparatory for a night attack. They approached to a point just out of range. There lay the steam sloop Richmond next to the east bank of the river, with twenty-two guns; then the sloop-of-war Vincennes, with fourteen guns, next the sloop-of-war Preble, with fourteen guns, and next the steam sloop-of-war Water-wheel, with four guns. They all lay abreast, across the Mississippi at the head of the passes, headed up stream, with their springs out, guns shotted and all ready for action at a moment's notice. These four Federal boats with fifty-six guns and well manned, were a mighty power for the single Nondescript, with nineteen heroes and no guns to attack. Some of the Confederate naval officers had said that the Nondescript would be blown out of the water. Leaving Fort Jackson at about 8 o'clock on the morning of October 12, 1861, with Captain Austin, her commander, as the only man on deck and each man at his proper place below the ram proceeded to and arrived at the scene of action about 3 o'clock in the morning. The Richmond had been selected by Captain Austin in the afternoon as the Federal boat first to be attacked. Nearing the Richmond the Nondescript was got under the utmost headway, and not until she was too near the Richmond and until it was too late to withdraw without disaster, perhaps disaster, was it discovered that a schooner was lying alongside the Richmond on the side of the attack. The ram proceeded all steam on, and striking the schooner first cut her in

two and ran the iron prow of the Nondescript clear into the Richmond. The ram then hauled off. The schooner sank. The Richmond discharged her broadside of guns at the ram, but without effect. The Richmond had herself disabled and leaking and withdrew, giving signals of danger to the other boats and the blockading squadron all disappeared down the passes. The blow which the ram struck such a concussion upon the ram as to disable one of her engines and render her unfit to attempt further aggressions, but it did not destroy Captain Austin's footing on the deck. The ram was not aided or followed by any fire-rafts, or any steamers, or propeller astern of her, nor were any shells thrown or guns fired at the Federal fleet, as some Federal accounts have described. The ram was taken back to New Orleans and repaired, was adopted by the Confederate authorities, and Mr. Stevenson was fully compensated for her. The Nondescript was named the Manassas by Stevenson soon after the battle of Bull Run. After her victory, the Confederacy having been thus taught by Mr. Stevenson how to build effective war vessels, then, and not until then, began changing the Merrimack into an iron-clad ram at Norfolk, Va.—N. Y. World.

Animal Intelligence.

Various writers have spoken of the behavior of monkeys to their ailing and dead companions. Mr. Darwin gives instances of the grief of female monkeys for the death of their young. Certain female monkeys kept by Brehm, in North Africa, died from grief consequent on the death of their young. An instance is narrated in which a female monkey having been shot, the leader of the troop came to the door of the tent and mourned for the body, after indulging in a series of threatening gestures. The body was given him, and thereafter he retreated, bearing it away, with every expression of sorrow, in his arms. The Gibbons are said to attend carefully to injured companions, but to take no notice of dead friends. A monkey has also been known to extend a cord to another which had fallen overboard from a vessel. I observed that when one of their dead companions was shown to the remaining occupants of my cage, they did not appear to be frightened, but seemed to regard the dead body with indifference and to exhibit very little curiosity on seeing the still form of their companion. When, however, one of the family was ailing the others paid it a great amount of attention, not always, so far as I could see, of a friendly or sympathetic nature. When Paddy, the capuchin, was ill, and in fact just before his demise, his friends appeared to me to endeavor to raise him from the recumbent posture in which he lay. Whether this was done in anxiety for the sufferer or mere curiosity I am unable to say. Perhaps both ideas animated the survivors in their attentions to their sick friend. On one occasion I observed in Cetchy, the ooty mangabey, a singular example of what I concluded may legitimately be called the reasoning faculty in the truest sense of the term. Seeing his anxiety to obtain a small piece of apple which I held

THE UNDER DOG IN THE FIGHT.

I know that the world, the great big world,
From the peasant up to the king,
Has a different tale to tell,
And a different song to sing.

But for me—and I care not a single fig
If they say I am wrong or am right—
I shall always go for the weaker dog,
The under dog in the fight.

I know that the world, the great big world,
Will never a moment stop
To see which dog may be in the fault,
But will shout for the dog on top.

But for me, I shall never pause to ask,
Which dog may be in the right,
For my heart will beat, while it beats at all,
For the under dog in the fight.

Perchance what I've said I had better not said,
Or 'twas better I said it in song,
But with heart and with glass filled cheek to the
brim,
Here's a health to the bottom dog.

—David Barker.

Edwin and Angelina—Their Cow.

Edwin and Angelina resolved when the spring time came that they would move their household gods and goods out to some suburban town—a life infinitely more to be desired than existence cooped up within the narrow limits of a French flat.

Edwin was consumed with that passion for the country which all feel who have not lived there, and Angelina, having seen a picture of Marie Antoinette as a milkmaid, in a short-skirted costume with tulle and natural roses and a pink sash, resolved to keep a cow and so have her own milk, butter and eggs. Edwin heard, trembled—he was always afraid of cows—and obeyed.

It had been his intention to purchase a Jersey cow, and the animal which he obtained was vouchered for as coming from Plainfield, in that State, but somehow it did not come up to his ideal of a Jersey heifer. Instead of being small and plump and fine-haired, the cow of commerce proved tall and gaunt—so gaunt that but for a thick coating of burrs she would have proved unequal to the effort of casting a shadow; her horns would have been worthy of a stag of ten—or even eleven, and she had a wild look in her eye.

It was at Tremont where Edwin and Angelina had taken up their abode, and the cow—which Angelina had named Bologna from its warlike appearance, and having an excuse through erroneous idea that Bologna was the Goddess of War—had not occupied the Swiss chalet provided for her accommodation more than an hour when it occurred to her to prospect the surrounding county and see if she could not discover something that was not fit to eat—an article of diet which for a cow always possesses a fearful fascination. To untie her halter and unlatch the stable door was easy for a cow of her fertility of resource, and though Angelina appeared with the broom and aimed a blow at her, it was such an irresolute and wavering blow that the cow with a snort of mild contempt kept on and Angelina fled.

How Bologna passed the earlier part of the afternoon is not known, but about 4 p. m., she appeared at Krueger's grocery, and, having thrown out skirmishers and discovered that Krueger was busily engaged with another customer, occupied the sidewalk in force. There was a barrel of potatoes exposed and a basket of lettuce, but naturally she passed these by contemptuously for a case of tinned lobster, and it was only when she had failed to make any impression on its contents that she turned her attention to a box of condensed yeast cakes. There were twelve dozen cakes in the box, and when Krueger discovered her and drove in her picket-line with a garden-rake she was assimilating the last cake, and retreated in triumph, carrying off upon her horns the bushel basket he had thrown at her as a trophy of victory.

The basket was for some time an encumbrance to Bologna, but having eaten the bottom out of it and pushed the remainder comfortably around her neck, she was able to find her way home, where Angelina welcomed the returning prodigal, being touched by her repentant appearance, and comforted her with buckets. That poor bossy was thirsty was made manifest by the avidity with which she quaffed the comparatively crystal fluid and moored for more.

When Edwin returned from New York in the evening he was surprised to find that a large number of neighbors had congregated in his yard, and on approaching the excited knot he found that Bologna had changed so he hardly knew her. She had attained a portliness positively appalling, and displayed signs of mental and physical uneasiness.

"Seems to me as if the critter had eaten poisonweed," remarked one of the neighbors; "She's all bloated up like an aldor-man."

"Mebe dot cow bite himself mit some mad docks, don't it?" hazarded a German, "Hydrophobia? well, yes, there is considerable amount of foam on her lips—better have her shot."

"No; don't shoot the poor creature—another her between two feather beds."

"O, it can't be hydrophobia," said Angelina; "the poor creature does not seem at all furious—she seems in pain. See, the great tears are standing in her eyes."

At this moment Judge Bridgemoose came up briskly. The Judge was a portly man, with an expansive shirt-bosom and a stout gold-headed cane, and what he did not know about anything was not worth knowing, in his opinion.

"Sho!" exclaimed the Judge, "that ar cow's no more got hydrophobia 'n I have; wind-colic's what ails the critter. Git up, Sukey! It ain't a mite dangerous!" And with his gold-headed cane he punched Bologna vehemently in the ribs.

There came a cloud burst of steam and Bologna resumed her original proportions with the instantaneity of a transformation scene. There was a confused impression in the minds of those present, that they were at a rehearsal of the Moscovite coronation, then, that Tremont had been struck by a waterspout or that a soda-fountain had burst, or a careless baker had let the malted slip while opening a keg of beer. Violent emotions, however, are always of brief duration, and after Bologna had been seen for about

two minutes to discharge yeast from—it seemed—every hair of her hide and the brass knobs on her horns, the fury of the tempest abated and the survivors could swear and flee.

Judge Bridgemoose, who had been out of the direct line of fire, as one might say, had not suffered so severely as the others, but his shirt-bosom looked like the Republican organization in the State of New York. He has, however, found consolation in the fact that Krueger has sued Edwin for the condensed yeast, and Edwin has put in a counterclaim for the services of Bologna in advertising it.

The Bad Boy Goes out Riding.

The grocery man asked the bad boy: "But why are you not working at the livery stable? You haven't been discharged, have you?" And the grocery man laid a little lump of concentrated lye, that looked like maple sugar, on a cake of sugar that had been broken, knowing the boy would nibble it.

"No, sir, I was not discharged, but when a livery man lends me a kicking horse to take my girl out riding, that settles it. I asked the boss if I couldn't have a quiet horse that would drive himself if I wound the lines around the whip, and he let me have one he said would go all day without driving. You know how it is, when a fellow takes a girl out riding he doesn't want his mind occupied holding reins, and I was thinking that to-night you had promised the twenty-third man that he should have one of them."

"Oh, well, Mary," said Osborn, "don't you think it would be a mean man to run for sheriff who wouldn't promise a pup to a friend?"

A SAN FRANCISCO millionaire, hoping to encourage his promising son in ways of thrift, promised to give him two per cent a month interest upon any money that he might save out of his spending allowance and deposit in the paternal treasury. The young man was getting \$30 a week for pocket money, and promised to show his appreciation of his father's affectionate offer. He began to make deposits without delay, and kept the practice up with remarkable regularity. The old gentleman noticed presently that the deposits exceeded the whole of the boy's allowance, but accounted for this by supposing that he had saved some money previously. Besides this, he received money frequently from his mother. So the fond parent rejoiced in the saving disposition that his son was displaying. This continued until the boy's deposits assumed such dimensions as to demand an explanation. It then turned out that most of the money that he had been depositing had been borrowed. Inasmuch as he was drawing interest on his deposits at two per cent a month, and was paying only ten per cent a year for them, he had found that business decidedly attractive and profitable.

Those who have been at a railroad eating-house, and seen the engineers, firemen and brakemen come in and wash the smut off their honest faces, will appreciate the following story:

A freight train came along and stopped at a junction eating-house, a few minutes since, after midnight, and the hands went in for a cup of coffee and a sandwich. The fireman of the engine was breaking a sandwich in two, and levering big black marks from his thumbs and fingers on the cover of the sandwich. He spoke to the sleepy-looking lunch stand attendant as follows:

"Say, has old Nate, the fireman of the Mog engine been in here lately?"

The clerk yawned, rubbed his eyes, and while he held a coffee cup under the faucet to replenish it for the conductor, he said:

"Yes, he was in here night before last. He just came in and registered on the towel, and went west."

It was a polite way of saying Nate had come in and washed his face.—*Peck's Sun.*

A GENTLEMAN entered the compartment of an English railway coach in which were already five men, and seeing a parcel of thin papers on the seat, he picked them up. Looking at them and then at his companions, he asked if a gentleman had laid a bundle of papers.

Each man said "No," he handed the bundle to the station master, saying:

"As they seem to be bank notes, I had better leave them to you."

The men agreed that he had done right, but after a time, one began to feel in his pockets, and with many imprecations on his stupidity, announced that he had lost a bundle of notes received that day at market. A discussion ensued as to what was to be done, and it was agreed that the best thing was for the owner to get out at the next station, take a hack, and go back as hard as he could.

As the victim hurried off, the gentleman laughed a quiet laugh, and said:

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When conversing at the Capitol on the importance of writing plainly and legibly, Mr. Clay told an amusing story about a Cincinnati grocery house, who, finding the market short of cranberries, and under the impression that the fruit could be purchased cheaply at a little town in Kentucky, wrote to a customer there, requesting him to send "one hundred bushels per Simmons" (the wagoner usually sent).

The correspondent, a plain, uneducated man, had considerable difficulty in deciphering the fashionable scrawl common with merchants' clerks of late years, and the most important word, "cranberries," he failed to make out, but he did plainly and clearly read—100 bushels per Simmons. As the article was growing all around him, all the boys in the neighborhood were set to gathering it, and the wagoner made his appearance in due time in Cincinnati with eighty bushels, all of which the wagon boy would hold, and a line from the country merchant that the remainder would follow the next trip. An explanation soon ensued, but the customer insisted that the Cincinnati house should have written by Simmons and not per Simmons.

PLANTATION PHILOSOPHY.—I heard a white man the other day say that in all of his plantation experience he never saw a honest nigger. "Dat may be true, an' wid equal directness de gentleman coulder said dat honest white men is sorter scarce. Dar is a certain amount ob deceit what it stands a man in 'ter practice. When I has a pair ob breeches dat is too short for me I rolls 'em up a little. Ef folks sees dat yer breeches is too short, dey commences ter question yer success in business, believing dat yer had to take any kind ob clothes dat come de handiest, but when yer rolls up yer breeches dey thinks dat it is a mat. ter ob choice. I alters takes off my hat when a white man speaks ter me. Dis simplicity ob politeness was impressed on me when I was a chink ob a boy. One day old marse called me inter de house an' ginter talk ter me. Puffy down he lifted his walkin' stick an' knocked me down, an' I since come ter de 'clusion dat it was 'case I didn't take de hat off an' I've been monst'ous p'lic ever since den, an' come ter think ob it, dar ain't no extra expense connect wid de fact."

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"Didn't he look astonished?" asked a disconcerted friend.

"No," said Sheridan; "he was just going to look astonished, when he remembered his manners, and swept the money from the banker's hand as if he had not given up any idea of seeing it again."

been shaken to the ground, after lying there for a few moments, as if they were really leaves, they crawl toward the tree, and ascend the trunk without seeming to know that they have the power of getting back to their quarters in a much quicker and easier way.—*Harper's Young People.*

VARIETIES.

JOHN OSBORN ran for sheriff in St. Paul, Minn., and while he was working all the boys with his good nature he had frequent calls at his house, and whenever a man with a fancy for field sports came, the talk always fell upon a beautiful setter and her fine puppies.

"Nice puppies, John."

"Yes, bully puppies, ain't they?"

"They are the most beautiful setter pups I ever saw anywhere."

Then the candidate for Sheriff would take the man aside, and, in a confidential tone, tell him:

"You just wait till after election and I'll give you one of those pups."

This thing had been going on for a couple of weeks, and one evening a man shut the door and left the house with the promise of a pup lingering in his ear, where Mr. Osborn asked:

"John, how many puppies are there?"

"Five. Why?"

"Well, I was thinking that to-night you had promised the twenty-third man that he should have one of them."

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not only healthy for the cow, but that it promotes the secretion and disposition of the putrid particles of the animal system, which would otherwise be absorbed by the secretory glands and be carried off in the milk, and leaves the latter not only purer but much better, and gives promise to the butter maker of a higher price in the market.

And the food and water are not less important; the former affects beyond shadow of doubt, the quality of the butter produced, for the essential oils of vegetables having distinct flavors, Prof. Arnold tells us, are taken into the milk without elaboration or change. Bitter milk is sometimes caused by ragweed or other vegetation in the hay; and the pumpkins fed in the fall always affect, though not unpleasantly, the flavor of the butter. I have seen, in my country experience, a herd of dairy cows standing knee-deep in a pond or stagnant water covered an inch deep with a "greenery gallery" scum, this being all the drink they could get during the torrid days of August, and I needed no telling to understand that their owner was confident there was "no money in making butter." Perhaps I am non-progressive, and I admit that I have no experience with it, but I do not believe that first class butter can be made from the milk of cows fed on ensilage, brewers' grains, glucose refuse, or any fermented food, and I have chemical reasons for my want of faith. Fresh grass, good hay, clean corn fodder, with meal and bran, make foods on which cows can produce pure milk, from which a woman has a right to expect good butter if she does her part.

Her work begins where the milk is kept and with the care of the dairy utensils. Butter which tastes of the cellar is "uncommon nasty" as our English cousins would say, and it should be thoroughly cleaned and all debris of the winter's store of vegetables removed, as also all boards, musty barrels and the like. I have known the sorting over a bin of potatoes in the cellar to spoil a whole churning. White-wash the walls thoroughly, stop up the rat holes, sprinkle copperas water or dilute carbolic acid freely. Secure a good circulation of air; by closing windows during the warmest part of the day, and opening them at sundown or a little before, the temperature can be kept moderately even. Pans, pails, strainers, all "milk dishes," should be washed with unusual care, and scalded with plenty of boiling water, not hot, not water which boiled ten minutes ago, but water actually boiling at the moment of using.

Authorities differ as to whether milk should be skimmed before souring or after that process has well begun. In my own experience I thought I had the sweetest and most aromatic butter when the milk was skimmed just at the "turning point," when little "points" appeared on the bottom of the pan when the milk was poured off. Experience is the surest guide, but in warm weather the milk will sometimes anticipate one's best intentions and get too sour. One cause of poor butter is that churning day is delayed too long, perhaps because the dairymaid thinks it is not "worth while" to churn such a small quantity of cream, it thus gets stale, too sour, and fermentation begins. No good butter that time. Every other day, every day in hot weather, (unless the cream is kept at a low temperature by using ice), twice a week in winter, is none too often to set the churn dasher in motion. "Doctors disagree" as to whether butter should or should not be washed; some who will not use water, rinse off the buttermilk with sweet milk, but pure water at a temperature of 45 degrees or colder, will take out the buttermilk, and cool the butter, which will not require the excessive working which injures the "grain."

"Greasy-looking" butter is due to over-working, to turning too rapidly or too long, or having the cream too warm, or it may be caused by feeding too much oil or cotton seed. Use fine salt if you want a close grained "gilt edge" article, and remember that though you may make it "salt as Lot's wife" you do not materially increase the weight, and do decidedly lessen the consumption.

Ice, in summer butter making, is so much of a convenience as to be almost a necessity, and is within the reach of every farmer who will take a little trouble to secure it. It saves "lots of work" to the women, and there is no vexation of spirit over soft butter. Instead of turning hot or cold water, according to the season, into the churn to raise or lower the temperature, it is much better to set the cream or churn into a vessel containing either hot or cold water and let it remain, stirring occasionally, till the proper temperature is reached.

An old rule says butter should be worked the second time until the water which runs from it is clear. At all events, buttermilk must be a minus quantity when it is ready to pack, if it is expected to keep. In packing, do not use any package in which anything else has ever been kept; not even if of stone. Especially avoid anything that has held pickles, vinegar, lard, etc. If your churnings are better, do not try to fill a large package; better use a smaller one and fill it quicker. The more closely the butter is packed the more perfectly the air is excluded, the longer it will keep. Put a thin layer of fine, wet salt on the bottom of the crock; pack the butter firm and smooth, and cover with a cloth wrung out of strong salt and water to which a little saltpetre has been added. Keep this cloth wet and constantly in place, and the crock covered as tightly as possible till it is full. Cut a circle of cloth to fit the top of the crock tightly, wet in salt-and-water as above, press firmly down on the butter, and cover with a quarter of an inch of fine damp salt; this will harden by evaporation and make a cover impervious to air; cover tightly. Probably some ignorant consumer will swear about buying so much salt, but a feeling of conscious virtue will sustain you, and you won't hear him, while the butter, thus shut from air, will retain its flavor much longer, especially if madame will insist on having the butter as it is used covered close with a cloth wet as when packed. For larger packages, intended to keep longer and be sent

A damaging admission—letting the hens in to the newly planted garden.

What's in a name? Well, if it's a Russian name we should answer, the alphabet.

It is spring time with the frog when the small boy is around with a stone.

Latin is a dead language—especially when an inexperienced drug clerk fools with it.

The agnostic is one who knows nothing certain, and doesn't care whether he does or not.

Just now the commencement orator is busy shaking his fist at the looking glass.—*Philadelphia Times.*

What is the difference between a dull razor and a bad boy? None; for they both need strapping.

Tony Pastor has just paid \$65.00 for his house. It is not every pastor who can afford to be so "low."

Fenderson says he wishes he was a rumor, for rumor soon gains currency, and that he has never been able to do.

An old printer who played his first game of nine-pins and knocked them all down, said: "Pity, by jingo."

If an idea strikes you forcibly run amuck on the busiest street, and you may never be affected in like manner again.

"I've been heron bad things about you," said one bird to another. Let's stork about something else," was the response.

Jawy.—"Talk about the jaws of death!" exclaimed a man who had a termagant wife; "I tell you they're nothing to the jaws of life."

"You write for money, but I write for honor," exclaimed an author; "Ah! each writes for what he most needs," replied his companion.

A tin pan carelessly hung on a bedroom door is said to be the best burglar alarm yet invented, with the single exception of a colicky baby.

A housekeeper asks: "What is the simplest way to keep jelly from moulding on top?" Shut a small boy up in the pantry for a few minutes.

A little fellow in a primary school, after he had correctly spelled the word "knife," asked his teacher the puzzling conundrum. "But what is the k for?"

A six-year-old was enveloped in a shirt much too big for him. After struggling about for some time he burst out: "Oh, ma! I feel awful lonely in this big shirt."

Yesterday a young man was round town pricing bonnets and such truck. He was trying to determine whether or not to propose to a girl. He decided not to do it.

A solemn old scientist printed the fact that by boiling the feet in leg water a man could double his circulation, and now all the editors and having tanks fitted to their office stoves.

A long haired poet has a poem on "The Lost Kiss." He doesn't make it very plain as to how he lost it, but it is presumed her mother came into the room just in time to catch her at it.

It was, of course, an Irishman in his very best mood who said that landladies are so grasping that they take a tenth of all the rent they have, and they would even take a twentieth if the law allowed them to.

Elderly philanthropist to a small boy who is vainly striving to pull a door bell above his reach: "Let me help you, my little man." "PULL THE BELL," said the boy. "Now you had better run, or we'll both get a licking!"

It is said that a young lady can never whistle in the presence of her lover. The reason is obvious. He doesn't give her a chance. When she gets her lips in a proper position for whistling something else always occurs.

Little eight-year-old Grace on coming home from school was asked by a caller if she intended to be a schoolma'am when she got old enough. She quickly responded: "No, sir; I'm going to be nothing but just a mother to my children!"

Cashier: "Excuse me, madame, but your account is rather overdrawn." Mrs. Maitrevers (whose husband is off on business and has left her a check-book): "Oh, Mr. Cashier, that can't be possible. I've got lots of checks left."

The other day on an Arkansas railroad, an old gentleman sat half asleep, with a book entitled "The Train Robbers" lying on his lap. Pretty soon he sank to sleep. The window sash fell with a loud report and the old man, springing to his feet and throwing up his hands, exclaimed, "Gentlemen, I haven't got a cent!"

An Arkansas boy, writing from college in reply to his father's letter, said: "So you think that I am wasting my time in writing little stories for the paper, and the old man's saying that the man who writes except for money is a fool. I shall at once pay Dr. Johnson's suggestion and write for money. Sincerely, Son."

A boy was one day examined by his teacher in arithmetic. He was asked, "Suppose you had \$100, and give away \$20, how would you ascertain how much you had remaining?" His reply to both teachers and scholars in a roar of laughter, for with his own peculiar drawing tone he replied: "Well, sir, I—I'd just count it."

The Household.

THE ESSENTIALS OF GOOD BUTTER.

Who makes all the poor butter? I never knew a woman who was not prepared to assert that her butter was of the truly "gilt-edge" sort. Then whence comes the supply of "low grades" which is quoted as such a potent factor in depressing prices, or who furnishes that commodity we see ignobly rated in some market reports as "grease butter"? It is as much of a conundrum as to know what becomes of everybody's "smart child."

The truth is butter is a "perishable commodity," since by improper handling it rapidly deteriorates in quality. I don't care two straws how good butter is when it leaves the farm, if it is dumped into a cellar redolent of all the odors known to that omnium gatherum, the village grocery, there to remain absorbing bad smells till it is packed with a quantity of other makes, in half-cleaned packages, and sent off to the city, it is going to make the man who has to eat it because he cannot help himself, say "swear words" and slander farmers' wives. It does not "eat" one bit better because it is labelled "Best Creamery." The best butter made in the country never sees a city market; it is greedily snatched up for "home consumption," but much of that which is really excellent, is not well packed and sent off in shape to hold its quality; while the truth is that a great many who make butter do not know what a really superior article is. They are accustomed to their own product, and think it good because they can eat it with a relish; and they do not know how to make the most of their surroundings.

In the first place, butter making is a co-operative business; the two heads of the family must be united in their aim. Absolute cleanliness is the first essential and it must begin in the barn. Milk from cows reeking with filth, milked in a filthy stable, by unwashed hands, will have that indescribable odor which I have heard called "cowy," and which no after care can remove. A good many farmers would indulge in a Beethoven laugh without words at the idea of carrying a cow, yet dairy authorities assure us it is

not only healthy for the cow, but that it promotes the secretion and disposition of the putrid particles of the animal system, which would otherwise be absorbed by the secretory glands and be carried off in the milk, and leaves the latter not only purer but much better, and gives promise to the butter maker of a higher price in the market.

And the food and water are not less important; the former affects beyond shadow of doubt, the quality of the butter produced, for the essential oils of vegetables having distinct flavors, Prof. Arnold tells us, are taken into the milk without elaboration or change. Bitter milk is sometimes caused by ragweed or other vegetation in the hay; and the pumpkins fed in the fall always affect, though not unpleasantly, the flavor of the butter. I have seen, in my country experience, a herd of dairy cows standing knee-deep in a pond or stagnant water covered an inch deep with a "greenery gallery" scum, this being all the drink they could get during the torrid days of August, and I needed no telling to understand that their owner was confident there was "no money in making butter." Perhaps I am non-progressive, and I admit that I have no experience with it, but I do not believe that first class butter can be made from the milk of cows fed on ensilage, brewers' grains, glucose refuse, or any fermented food, and I have chemical reasons for my want of faith. Fresh grass, good hay, clean corn fodder, with meal and bran, make foods on which cows can produce pure milk, from which a woman has a right to expect good butter if she does her part.

Her work begins where the milk is kept and with the care of the dairy utensils. Butter which tastes of the cellar is "uncommon nasty" as our English cousins would say, and it should be thoroughly cleaned and all debris of the winter's store of vegetables removed, as also all boards, musty barrels and the like. I have known the sorting over a bin of potatoes in the cellar to spoil a whole churning. White-wash the walls thoroughly, stop up the rat holes, sprinkle copperas water or dilute carbolic acid freely. Secure a good circulation of air; by closing windows during the warmest part of the day, and opening them at sundown or a little before, the temperature can be kept moderately even. Pans, pails, strainers, all "milk dishes," should be washed with unusual care, and scalded with plenty of boiling water, not hot, not water which boiled ten minutes ago, but water actually boiling at the moment of using.

Authorities differ as to whether milk should be skimmed before souring or after that process has well begun. In my own experience I thought I had the sweetest and most aromatic butter when the milk was skimmed just at the "turning point," when little "points" appeared on the bottom of the pan when the milk was poured off. Experience is the surest guide, but in warm weather the milk will sometimes anticipate one's best intentions and get too sour. One cause of poor butter is that churning day is delayed too long, perhaps because the dairymaid thinks it is not "worth while"

Veterinary Department

Conducted by Prof. Robert Jennings, late of Philadelphia, Pa., author of "The Horse and his Diseases," "Cattle and their Diseases," "Sheep, Poultry, and Swine," and "The Farm and its Management." This journal is published weekly, and contains all the latest information in regard to the diseases of domestic animals. It is the only journal of its kind in the United States. It is published by the Michigan Farmer, and is sent to subscribers free of charge. It is a valuable work for all who are interested in the health of domestic animals.

Anthrax Fever.

WHEELER, STUBBS CO., N. Y., May 28, 1883.

Veterinary Editor Michigan Farmer.

I would like information in regard to some yearlings I have lost. The last of February one morning I found a heifer that would have been a year old this spring. I found her a little lame in the morning, and in the middle of the day I found her in the calf shed, lying flat on her side, with her legs out straight, shivering all over. I got her out of there into a warm stable; that night she died. The next morning I skinned her. I found the fore leg that she was lame in black from the knee up, and all over the shoulder and up the neck, and some black on the whole of that side. When I skinned the shoulder and neck a black watery substance would run out. Then three weeks later one morning I found a very nice steer that would have been one year old in May, lame in the same way, symptoms the same only he lived longer. Got lame in the hind leg on the same side and swelled between the fore legs and up his neck. He lived about 29 hours from the time I first saw he was lame. The next day after I lost the first calf I went and bought a bull calf, turned him in with the rest, he grew and done finely. The 19th of this month I tied him in the stable; the morning of the 21st he ate his mess and was well for all I saw, at noon he was a very little lame in one fore leg, in the afternoon he was stretched out and shivering like the rest; his shoulder swelled very bad indeed. Please let me know through the FARMER what ails my calves, and if there can be anything done for them. SUBSCRIBER.

Answer.—From the symptoms and pathological changes in the young cattle as described we feel safe in diagnosing the disease as anthrax fever, or carbuncle, as indicated by the blackened appearance of the diseased parts. This rapidly fatal disease is also known as inflammatory fever, black leg, black quarter, quarter evil, black striking, etc. The premonitory symptoms are so obscure as usually to escape notice; the loins, back and sides, are extremely tender to the slightest touch, succeeded by lameness, puffiness of the quarters and back, which in passing the hand over the skin with but slight pressure a crackling or crepitating sound is heard indicating gas or air in the cellular tissue under the skin known as emphysema; the animal moves with a staggering gait, finally falls, with head extended, flat upon the ground, sometimes in a comatose condition, rumination suspended, bowels constipated, eyes full and bulging, muzzle dry, horns and mouth hot, pulse irregular varying from 75 to 100 or more, respiration labored, the animal evincing pain by a peculiar moaning. The disease runs its course very rapidly, usually with a fatal termination in from twelve to twenty-four hours after the first symptoms are noticed. The young and thrifty animals are usually its victims. This disease may make its appearance in an epizootic, or enzootic form, influenced by certain conditions of the atmosphere, as continued dampness, persistent fogs, coldness and humidity, cold storms, low inundated lands, stagnant pools, etc. Treatment: When the symptoms are fully developed, there is but little hope of relief; prevention is our only safe guard. Sanitary measures are of the first importance; cleanliness, proper ventilation when housed, clean, wholesome food and water are necessary. Occasional doses of Prof. R. Jennings' Bovine Panacea, known to us as a preventive of disease in cattle. This remedy at hand in cases of emergency would save many animals lost by delay in the prompt treatment of diseases.

Chronic Diseases of Urinary Organs.

FARMINGTON, May 2, 1883.

Veterinary Editor Michigan Farmer.

DEAR SIR.—In your answer to my letter in last week's FARMER, under the head of "Gravel or Disease of the Kidneys," you said: "Give two drachms of hydrochloric acid in milk of water." I have given it, and the horse drank it two or three times, but will not drink more than a day. I have to let him go without water before he will drink it at all. He breathes short and quick when at work, and is troubled more than ever with his water, which is about the color of a light green. Thinking you would not want to publish it, and being in a quandary as to what I should do, I send stamp for answer by mail. Truly yours, READER.

Answer.—The symptoms given in your letter of May 14 were so indefinite that it was simply impossible to diagnose the trouble with your horse satisfactorily. Diseases of the kidneys and bladder are not so obscure that even with the patient before us it is difficult to diagnose the true character of the disease; even in human medical practice, with the assistance of the patient to aid in diagnosing diseases of the urinary apparatus, they are often unsatisfactory to the practitioner. We publish your letter, because our advice was a failure. Try drachm doses of ura uris, powdered, twice a day, and report to us. When we assumed the responsibility of editing the Veterinary Department of the MICHIGAN FARMER, it was our desire for subscribers to inform us after receiving our advice whether or not their animals were benefited by our prescriptions. Not alone for our satisfaction, but for the benefit of our subscribers generally, who are interested in live stock. If our treatment is successful under the difficulty with which we labor in depending wholly upon symptoms imperfectly described by non-professionals, all interested should know it, as well as in cases of failure. Some three years ago a subscriber wrote us regarding a well-known bull, which for several months had been doing badly; we diagnosed the disease as best we could from the symptoms given, and prescribed for it; no improvement followed; the animal still pining away, the owner was advised by friends to destroy it. He sent for us to see the animal and advise him, after carefully examining the animal, we

discovered that we had been prescribing for a disease which did not exist, and quite opposite to that for which we had prescribed. A change of treatment saved the animal's life; he is reported to-day in better condition than he ever was before. We make this statement that subscribers may understand that they will confer a special favor on us, when our advice or prescriptions fail to give relief, to report all such failures for publication in these columns, for which we believe the necessity for a more careful examination of diseased animals before reporting to us will be apparent to those desiring veterinary advice.

Unexpected Dissolution of a Cow.

ROCKFORD, May 14, '83.

Veterinary Editor Michigan Farmer.

DEAR SIR.—I would like to ask you a few questions concerning a cow I have just lost. She was 15 years old this spring, calved May 11th, cleaned good and seemed to be in great pain; would look back at her side and moan by spells. The next morning she did not feel well, did not give much milk, did not eat all of her mess nor any hay, she could not get up, and seemed to be in great pain; would look back at her side and moan by spells, her ears, mouth and legs were cold, the same night she died. She had no fever any of the time that I could discover. When she opened her eyes, her head was about the size of a water pail and seemed inflamed; her lungs were covered with black and red spots, did not seem to be enlarged any. Is there any difference between congestion and inflammation of the lungs, in the appearance after death? How would the lungs appear if an animal died with any other trouble? Will you please give me the title of a good book on cattle and horses; one that is reliable. Wm. H. LONG.

Answer.—Your description of the symptoms during life are too indefinite to enable us to diagnose the trouble with your cow satisfactorily to ourselves, and the pathological description is no more satisfactory. We will therefore be content by answering your questions. In reply to the first, "Is there any difference in congestion and inflammation of the lungs?" Yes; congestion is distention of the lungs by engorgement, caused by mechanical obstruction, interfering with the free return of the venous blood, or to the action of stimulating agents, either as food, drink, medicine, etc. Whatever tends to interrupt the flow of blood to or from the heart is a cause of congestion, either of the lungs or any other part or organ where it may occur. Inflammation on the other hand, is characterized by heat, swelling, pain, redness and pulsation in all its various forms, and terminations would require more space than we can devote to it in these columns. To your second question "How would the lungs appear if they died with any other trouble?" An animal may die from a variety of diseases, and its lungs present a perfectly healthy appearance, a condition depending wholly upon the character of the disease. Any disease not involving the pulmonary organs, causes no morbid change in the lungs. To your third we would say the text books used in our veterinary colleges are Williams' Veterinary Medicine, price \$10; Steel on the Ox, \$6; Dobson on Cattle, price not quoted. For the ordinary reader these works are too scientific to be understood. The works of Prof. R. Jennings, "The Horse and his Diseases," "Cattle and their Diseases," are written in plain English, and free from technicalities, hence more valuable to the general reader. They are endorsed by the press and by all who have read them. Any works on the horse, sheep, ox, etc., including the text books of the veterinary colleges, will be sent post paid at publishers' prices, on receipt of the amount. Address Prof. R. Jennings, No. 201 First St., Detroit, Mich.

Bruised Knee in Filly, and Induration Swelling in Colt.

WHITE PIGEON, May 16, '83.

Veterinary Editor Michigan Farmer.

DEAR SIR.—I have a filly, two weeks old, that has a bunch on her left knee, in front about the size of a half walnut, which is soft, and makes her quite lame. She has been lame ever since she was foaled. I have a two-year-old colt that has a bunch in front, on the ankle of the right hind leg, causing a swelling of the hock, so that the bunch is quite large and is loose from the bone; was done when a colt running with the mare. About two weeks ago I blistered it with cantharides, causing a swelling, turpentine and oil, raising a light scab. Please tell me what to do for them through the FARMER. SUBSCRIBER.

Answer.—The swelling on the knee of your filly is probably due to a bruise at the time it was foaled. Bathe the part with hot water twice a day, and then apply Professor R. Jennings' evinco liniment, rubbing well on each application. For your two-year-old colt, use the following: bin. iodine of mercury, one drachm; colomine, one ounce; mix well together; make one application, dress with hard forty-eight hours after. If necessary, repeat the ointment in two or three weeks; dress as before; wash the part occasionally with castile soap and water.

Diarrhoea or Scours in Calves.

A reader asks us to give him a remedy for this disease. Diarrhoea or scours in calves is due to the derangement of the digestive apparatus, caused by too rich or too poor food, or deterioration of the milk of the dam, from any cause. Treatment—give the following: Gentian root, 2 oz.; Jamaica ginger root, pulv., 2 oz.; pulv., willow charcoal, pulv., of each one oz.; mix all together and divide into twelve powders; give one powder three times a day, in milk or oatmeal gruel.

Call for State Convention.

All veterinary surgeons practicing in the State of Michigan, favorable to the formation of a protective Veterinary Association, are earnestly requested to send

their names and address to the U. S. Veterinary Journal, Chicago, without delay, to be used in a call for a convention of veterinary surgeons to be held in the city of Detroit, July 31, 1883. Notice hereafter.

A FOOD PRESERVATIVE.

For some time the Eastern papers have been recounting the wonderful merits of an article called "Rex Magnus," or the Humiston Food Preservative. Since the total failure of "Ozone" to accomplish what its advertisers claimed for it, we confess to a decided prejudice against so-called "food preservatives," and the reports of various people, scientists and others, upon their experience with "Rex Magnus" were read with incredulity. But recently some tests made by Prof. Samuel W. Johnson of Yale College, with this food preservative seem to show so much merit in it, that our doubts are rapidly being dissipated. Prof. Johnson's report on the trials to which he subjected the article, so it is interesting that we give copious extracts from it: The Professor says:

About mid-day of Jan. 31st ult., eight (8) joints and cuts of beef, mutton, pork and veal, seven fowl and birds, two white fish, one dozen eels, and one gallon of oysters, were bought in the open market, and treated in my presence by Prof. Humiston—all, with one exception, by placing in solution of the REX MAGNUS, "Vandine," previously prepared by Prof. Humiston and placed in new stone jars, and on Feb. 1st, after 24 to 36 hours immersion, the articles, except as hereinafter stated, were hung up in my laboratory, where they or portions of them have remained, fully exposed to air and light, until this afternoon, or for a period of 35 days.

One beef-steak, instead of being immersed in this antiseptic solution of REX MAGNUS for 24 hours, was simply dipped in it, then folded together and laid upon a plate, after being wrapped up in a thick towel, which had been wet with this solution.

This wrapping was thereafter occasionally moistened with water or with the solution just named. The eels were immersed in this solution for 24 hours, then laid upon a deep plate and covered with a towel, which, from day to day, was moistened with this solution.

The oysters, with their liquor, were mixed with a different antiseptic solution, or "Ocean Wave" brand of REX MAGNUS, and have so remained, in an open jar.

On the afternoon of Jan. 31st, two samples of cream, obtained by Mr. Hubbard, and early in the same evening a quart of fresh milk, procured by me from the Connecticut Agricultural Experiment Station, were treated by Prof. Humiston with the proper "Rex," and have since remained in the same apartment with the meats, being contained in glass bottles or cans.

The beef tins far mentioned were obtained in the open market of Frisbie and Hart of this city, and by them was stated in my hearing, to have been slaughtered in Chicago ten days before it was brought to my house.

The room in which these trials have been carried on has been warmed by a coal stove. Observations generally taken twice or thrice daily, with a self-registering thermometer have shown an average daily minimum temperature of 55° and maximum of 84°, the daily mean temperature having been 70 degrees.

On February 6th, at evening, I observed some spots of mould on the surface of the milk and cream and on the eels and steak that were covered by wet cloths. At the same time, on the inside of the folded steak, which had been simply dipped in the solution and then wrapped in cloths wet with it, a faint odor, suggestive of incipient putrescence, was perceived. On the evening of the 7th, a very slight musty odor was noticed, near the bone of one of the joints of beef. I then immersed this joint, as well as the steak and the eels, in the solution—of Rex Magnus—for about fifteen minutes, and hung up the joint, and wrapped the steak and covered the eels, as before.

Up to 2 p. m. of the 10th of February, with exception of the mold, as here mentioned, and the two cases of mustiness, or incipient putrescence, all of the articles (twenty-three in number), remained perfectly sound and sweet. The steak did not advance further in decomposition, and the joint showed no further trace of mustiness.

Prof. Humiston called again on February 10th, and in my presence took down the various meats, etc., and placed them for eighteen hours in the solution of Rex Magnus. On the following day they were restored to their previous places and circumstances in my laboratory, where they remained until February 16th. I opened the bottle of milk in the evening of that day, removed the moldy cream, and found that neither milk nor cream was sour. Taking a portion of the milk with me I joined a company of some twenty gentlemen at the New Haven House, where, during the evening, I tasted and ate oysters, chicken, beef, etc., etc., prepared by Mr. W. H. Masely, and stated by him to be the same which he in my presence took away from my laboratory on the morning of that day (leaving, however, a portion of most of the meats, etc., in my possession). The treated white fish I recognized, because it had dried to less than half its bulk when fresh, but it was sweet and good. The eels I also identified. In case of the other articles which I tasted, I could not distinguish between those which had been sixteen days in my laboratory and those newly taken from the refrigerator of the hotel. The oysters were perfectly palatable to my taste, and better, as it happened, than those served at the same time, which were recently taken from the shell.

The roast beef, steak, chicken, turkey and quail were all as good as I have ever eaten. The various portions of chicken, spareribs, beefsteak, etc., left in my laboratory February 6th, remained unchanged, except by external drying, for a week longer, but thereafter in some very damp weather, mold began to show itself upon some of them. The milk was found to be coagulated

on February 28th, but did not then have any sour odor or taste. Clots of mold appeared also upon the surface of the oyster liquor. The meats, likewise, were somewhat moldy.

Professor Humiston thereupon supplied me with a quantity of "anti-mold," a special brand of Rex Magnus. This I used, under his directions, and the effect was to arrest further development of mold on the various meats, etc.

From February 28th to March 6th, (when another treatment with "anti-mold" was given) these articles of food remained with me have kept unchanged in appearance and odor, except that in some cases a slight renewal of mold was manifested. The moldy cream, the giblets taken from the duck and turkey on the 16th ult., when they were cut in two by Mr. Mosley, and various refuse odds and ends of meats, fish and fowl, have since been lying in a plate, on the table in my laboratory. There has not been any odor of sourness, mustiness, or putrefaction perceptible in the air of the apartment, at any time, nor upon any of the articles, except in the two cases already instanced. The suppression of the mustiness and taint in these cases was prompt and perfect.

The use of "anti-mold" was begun much later than was planned, but I have no doubt that, had it been used at the beginning, the mold would not have appeared at all.

My tests of thirty-five days have certainly been severe, and the several preparations of Professor Humiston, with which I have experimented, have accomplished all he claimed for them. So far as I have yet learned, they are the only preparations that are effective, and at the same time practicable, for domestic use.

I should anticipate no ill results from the consumption of food preserved with Rex Magnus according to Professor Humiston's method. I should suppose his preservative to be no less salutary than common salt, and much more so than saltpetre.

WHO IS J. SCHOENHOF?

At a free trade dinner in New York city on Monday night of last week, Mr. J. Schoenhof was called upon to reply to the toast of "Free Raw Materials." In his speech he said:

"Free raw materials and a tariff on manufactured goods not exceeding 25 per cent, and graded according to their skill and finish of production, would be more of a protective tariff than a tax of 50 and 100 per cent, oppressive to producer and consumer alike."

He then proceeded to "lay out" the wool-growers in the following free and easy style:

"Held down as we are by such loads, and prevented from entering into possession of our birthright by the greed of a handful of men, now these National paupers and mendicants, the wool-growers, who only number one-tenth of the farmers, step forward and complain of the slight reduction of the tariff on wool, and urge the formation of a National association for the purpose of recovering the loss they have sustained."

"If we wish to reach results worthy of the occasion, then let us formulate our demands in unmistakable language: (1) A moderate tariff on manufacturers, in no wise to exceed 25 to 30 per cent ad valorem, graded according to the labor required for their production."

Mr. Schoenhof is certainly the most ardent foe that he has yet given an opinion on the tariff. He calls the wool-growers mendicants for asking protection, but favors woolen manufacturers receiving it. Of course they are not paupers or mendicants because Mr. S. probably belongs to that class. But it is the same old story. Free trade for everybody and every industry—except our own. No one seems to want free trade except for the other fellow. But Schoenhof takes the prize; he is the most gentlemanly and modest individual we have yet heard of. It is a pity such a fine fellow should be such a consummate ass.

Stock Notes.

At the fair at Lansing last week, Mr. Francis Graham sold the following Shortorns for the parties named:

For R. Hawley, Detroit: Lady Beaconsfield 4th, calved Jan. 23d, 1882, got by Beaconsfield 2d 4747, to C. L. Seely, Lansing. Beaconsfield 5th, calved August 2d, 1882, got by Beaconsfield 2d 4747, to J. J. Shearer, Greenville. Maitland Rose, calved August 12th, 1878, got by Oxford Buttery 40173, Osceola Salt Co., Osceola, Mich.

Maitland Rose 2d, twin, calved Sept. 2d, 1882, got by Beaconsfield 2d 4747, to A. Chandler, Jerome, Mich. Lady Beaconsfield 3d, calved November 14th, 1880, got by Beaconsfield 3d 3769, J. J. Shearer, Greenville. Strawberry 3d, calved Sept. 24th, 1882, got by Beaconsfield 2d 4747, to H. W. Springfield, DeWitt, Clinton Co.

Princess 7th, calved July 28th, 1881, got by Beaconsfield 2d 4747, to J. J. Shearer, Greenville. The property of Mr. Backus, Williamson: 2d Duke of Barrington, calved Sept. 20, 1882, got by Duke of Barrington 43329, to C. Doty, Lansing. 3d Duke of Barrington, calved Oct. 27th, 1882, got by Duke of Barrington 43329, to Wm. Van Ness, Edwardsburg, Cass Co., Mich.

These were two very fine young bulls, of rich red color, and looked, like their owner, as if they had been well taken care of. The property of R. H. Holmes, Lansing: Fadette, calved May 1st, 1880, by Arnold 25550, to H. C. Everett, Lansing. Fadette 3rd, calved April 1st, 1876, by Helmer 3802, to S. E. Scott, Detroit. Lucinda, calved November 10th, 1880, got by Aldrie Gwynne 25512, J. F. Drew, Jackson, Mich.

Mary, e. c. by Duke of Bonheur 38033, J. F. Drew, Jackson. Piel, calved December 20th, 1882, got by Aldrie Gwynne 25512, H. C. Everett, Lansing, Mich. Gylpene, calved October 30, 1882, by 2d Duke of Ridgeway 49049, to A. D. Holmes, Lansing, Mich.

Mr. Hawley's stock was in only fair condition, and sold reasonably well. Mr. Holmes' animals were decidedly "off" in appearance and condition, and they would have made much better prices if they had been better cared for. The two young bulls sold for Mr. Backus brought \$120 and \$105 respectively. They were the best bred, were in good shape, and, while selling better than the others, were really the cheapest animals sold.

U. S. District Attorney Speaks.

Col. H. Walters, U. S. District Attorney, Kansas City, Mo., authorizes the following statement: "Samaritan Nervine cured my niece of spasms." Get at druggists. \$1.50.

The British Grain Trade.

The Mark Lane Express, in its weekly review of the British grain trade for the past week, says:

The brilliant weather has had a beneficial effect on crops. Wheat is strong and healthy. The demand was nominal and the supply moderate. Prices rather lower. Foreign wheat dull and lifeless. Retail demand somewhat weaker. Best grades of flour steady but others were somewhat easier. Foreign flour unchanged, finest grades firm, American unsound, almost unobtainable. Barley and oats unchanged, the same may be said of foreign barley. Oats in large supply and slow. Maize in bad condition, prices higher and the market flat. Off coast cargoes slow. There were ten arrivals and four sales. A dozen cargoes are due.

The Business Committee of the State Agricultural Society held a meeting at the Russell House, last Friday evening. The principal business was to decide on some attraction for the coming State Fair. It was finally resolved to arrange for a competitive drill of the militia companies of the State, or at least as many of them as could find it convenient to participate in it. The sum of \$800, on resolution of Treasurer Dean, was appropriated for premiums, and the committee were authorized to make all necessary arrangements. It is the intention to make this one of the leading features of the Fair, and suitable ground, put in the best condition possible for drill purposes, will be given the companies to perform their evolutions in; this space will be so arranged that there will be no interference by the spectators. Several companies have already signified their intention of taking part in the drill.

On the afternoon of Decoration Day a jam occurred on the big bridge between New York and New Jersey. A large number of persons were killed and a large number wounded. The crush was at a point where the roadway descends by steps about six feet. The crowd being forced upon those in front, drove them over the edge. It is thought the jam was first started by pickpockets who were plying their trade. One man, partly intoxicated, jumped from the bridge into Williams Street and was terribly injured.

COMMERCIAL.

DETROIT WHOLESALE MARKET.

DETROIT, June 5, 1883.

Flour.—Receipts for the week, 4,693 bbls; against 767 bbls the previous week; shipments, 2,519 bbls. The flour market is more active but unchanged rates. Purchasers are very cautious. Large stocks held abroad. Millers are not inclined to much business, as the present range of values in wheat margins are very light, and the outlook not encouraging. Quotations yesterday were as follows:

Roller process..... \$5 75 @
Winter wheats, city brands..... 5 75 @
Winter wheats, country brands..... 5 75 @
Winter patents..... 6 00 @
Minnesota brands..... 6 00 @
Minnesota patents..... 6 00 @
Rye flour..... 6 25 @

Wheat.—The improvement in the weather is shown very clearly by the course of the wheat market. A few days sunshine brings the "bears" to the front, and prices give way. This was the case yesterday, the fine day depressing values from 1/16 to 1/8 cent Saturday's closing figures, with a weak feeling prevailing among dealers. Quotations closed at the following range: No. 1 white, \$1 10; No. 2 do, \$1 01; No. 3 do, 85c; No. 2 red, \$1 18; No. 3 do, \$1 12; rejected, 75c. In futures closing prices were as follows: June, \$1 10; July, \$1 12; August, \$1 13; September, \$1 15; October, \$1 17.

Corn.—Very little moving. Yesterday new mixed sold at 55c per bu., and No. 2 is quoted at 53c.

Oats.—Quiet, and values a shade lower. No. 2 white held at 46c and No. 2 mixed at 44c, at which figures sales were made yesterday. A steady stock of oats is held, and business confined to sample lots, on which there are a wide range of values, running from \$1 25 to 60 cents, according to quality.

Feed.—Continues inactive and more or less unsettled. Two carloads of bran sold yesterday at \$12 25; coarse middlings are nominal at \$12 75; 615, and possibly would not command those terms.

Quotations.—Fair dealers at \$7 50 for common, and \$7 25 for No. 1 Ohio kid-dred.

Rye.—There is very little being handled. About 600 bu is the best quotation for good samples.

Butter.—Under heavy receipts of fresh made, the market is again lower, and 160 1/2 is the range for the bulk of the offerings, the latter being put in for a choice article. Creamery is quoted at 22 1/2 to 23 1/2. Old butter is a drug, and no one wants it.

Cheese.—Demands rather light, but up to the supply. New full cream State is quoted at 12 1/2 to 13c, and choice at 13c to 14c.

Eggs.—Market steady and firm at 17 to 18c per dozen. New full cream State is quoted at 12 1/2 to 13c, and choice at 13c to 14c.

Beeswax.—Scarce and very firm; quotations are 20 to 25c per lb.

Beans.—A fair and even good seasonable inquiry prevails and pickers are firm at about \$2 15 for fine hand-picked skins. For unpicked about \$1 60 to 65 would be paid.

Dried Fruit.—Market dull, and prices 15c to 20c. Apples, 15c to 20c; evaporated fruit, 14c; peaches, 15c to 16c; evaporated, 20c to 25c; pitted cherries, 20c to 25c; raspberries, 10c to 12c; California plums, 15c.

Honey.—Dull and weak. Fine white comb is quoted at 15 1/2 to 16c; strained, 15c.

Sugar.—Market quiet at about 13 1/2 to 14c for pure.

Pork.—Dull. It would be impossible to obtain more than 70 to 75c for choice hogs.

Peas.—Wisconsin dried blue peas; \$1 25; field peas, \$2 10 to 12c per bu.

Onions.—Firm, and unsettled; old stock is quoted at 40 to 45c; Bermuda, \$1 50 to 17c.

Potatoes.—There is a fair seasonable demand for old potatoes at 5 to 6c. On car lots 6 to 6c are prevailing terms. New potatoes are quoted at \$4 50 to \$5, and Bermuda at \$7.

LIVE STOCK MARKETS.

At the Michigan Central Yards.

Saturday, June 2, 1883.

The following were the receipts at these yards.

Cattle	Sheep	Hogs
Battle Creek..... 18	15	12
Chico, Wis..... 15	10	8
D. G. & M. Co..... 21	40	17
Grand Lodge..... 47	7	7
Home..... 10	10	10
Howell..... 15	46	6
Jonesville..... 34	3	3
Mason..... 32	2	2
Marshall..... 26	2	2
North Andover..... 27	5	5
South Lyon..... 8	35	5
Union City..... 16	40	10
Drove in..... 39	1	1
Total..... 318	121	58

CATTLE.

The offerings of Michigan cattle numbered 318 head against 261 last week. Besides these there were 15 carloads of cattle from St. Louis. The market was dull and dragging and a good share of the receipts both Michigan and western were shipped east in first hands. Local dealers had plenty of cattle from the west early this week, they will have no difficulty in getting all they require. Though the market had but little life in it at any time during the day, yet sellers would not accept any lower rates than those of last week, and sales were made on that basis. The following were the closing prices:

Good to choice shipping steers.....	\$5.75	6.25
Fair shipping steers.....	5.25	6.00
Good to choice butchers' steers.....	5.40	6.25
Fair butchers' steers.....	4.85	6.00
Fair to good mixed butchers' stock.....	4.75	6.25
Coarse mixed butchers' stock.....	4.40	6.10
Bulls.....	3.50	6.00
Stockers.....	4.25	6.00
Weigh Bros sold John Robinson 25 western steers and heifers at 80c lbs at \$5.10.		
McMillan sold Drake 3 feeders at 90c lbs at \$4.		
Brown sold Duff & Regan a mixed lot of fair butchers' stock at 1,076 lbs at \$4.75.		
McMillan sold Oberholser fair butchers' steers at 80c lbs at \$4.		
Brown sold Duff & Regan 1,430 lbs at \$5.25, and a bull weighing 1,410 lbs at \$5.25.		
Bent sold Fleischman 3 fair butchers' cows at 83c lbs at \$4.80.		
Weigh Bros sold John Robinson 22 mixed steers at 70c lbs at \$5.25.		
McMillan sold John Robinson a mixed lot of fair butchers' stock at 80c lbs at \$4.		
Brown sold Duff & Regan 10 mixed butchers' stock at 85c lbs at \$4.80.		
Weigh Bros sold Duff & Regan 30 mixed butchers' stock at 80c lbs at \$4.80.		
Smith sold Fitzpatrick 7 fair butchers' cows at 84c lbs at \$5.25, and 3 heifers at 84c lbs at \$5.25, and 3 calves at 84c lbs at \$5.25.		
Smith sold John Robinson 50 mixed steers and heifers at 80c lbs at \$5.25.		
Smith sold John Robinson 50 mixed steers and heifers at 80c lbs at \$5.25.		